

**EXHIBIT A**



# **NORTH SHORE** **SUSTAINABLE COMMUNITIES PLAN**



City and County of Honolulu  
Department of Planning and Permitting

**April 2011**



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Prepared for the City and County of Honolulu  
Department of Planning and Permitting

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# TABLE OF CONTENTS

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<b>PREFACE</b>	<b>P-1</b>
<b>EXECUTIVE SUMMARY</b>	<b>ES-1</b>
<b>CHAPTER 1. NORTH SHORE’S ROLE IN O’AHU’S DEVELOPMENT PATTERN</b>	<b>1-1</b>
<b>CHAPTER 2. THE VISION FOR THE NORTH SHORE’S FUTURE</b>	<b>2-1</b>
2.1 VISION STATEMENT	2-1
2.2 KEY ELEMENTS OF THE VISION	2-3
2.2.1 Maintain the Community Growth Boundary to Protect Agricultural, Open Space, and Natural Resources	2-3
2.2.2 Promote a Diversified Agricultural Industry	2-6
2.2.3 Enhance the Region’s Recreational and Educational Potential	2-6
2.2.4 Promote Hale‘iwa and Waialua Towns as “Country Towns”	2-7
2.2.5 Support Waialua as the North Shore’s Industrial Center	2-8
2.2.6 Direct New Housing to Areas Contiguous to Hale‘iwa and Waialua Towns and Use Rural Design Guidelines for Rural Residential Development	2-9
2.2.7 Provide Adequate and Appropriately-Sized Public Infrastructure, Facilities, and Services	2-9
2.2.8 Preserve and Protect Cultural and Historic Resources	2-11
2.2.9 Adapt the <i>Ahupua‘a</i> Concept as a Framework for Land Use and Natural Resource Management	2-11
2.2.10 Integrate Principles of Sustainability into Decision-Making Processes	2-13
<b>CHAPTER 3. LAND USE POLICIES AND GUIDELINES</b>	<b>3-1</b>
3.1 OPEN SPACE AND NATURAL ENVIRONMENT	3-2
3.1.1 Policies	3-6
3.1.2 Guidelines	3-7
3.1.2.1 Mountain Areas	3-7
3.1.2.2 Shoreline Areas	3-10
3.1.2.3 Wetlands	3-12
3.1.2.4 Natural Gulches, Streams, And Drainageways	3-13
3.1.2.5 Agricultural Areas	3-15
3.1.2.6 Parks	3-15
3.1.2.7 Scenic Resources And Scenic Views	3-15
3.1.2.8 Utility Corridors And Greenways	3-18



1	3.1.3	Relation to Open Space Map and Land Use Map .....	3-19
2	3.2	AGRICULTURE.....	3-19
3	3.2.1	Policies .....	3-22
4	3.2.2	Guidelines .....	3-23
5	3.2.2.1	Agricultural Lands .....	3-23
6	3.2.2.2	Agricultural Support Facilities.....	3-24
7	3.2.2.3	Agriculture-Based Tourism .....	3-25
8	3.2.3	Relation to Open Space Map and Public Facilities Map .....	3-25
9	3.3	PARKS AND RECREATION.....	3-26
10	3.3.1	Policies .....	3-32
11	3.3.2	Guidelines .....	3-33
12	3.3.2.1	Community and Neighborhood Parks and Facilities.....	3-33
13	3.3.2.2	<i>Mauka</i> Areas .....	3-34
14	3.3.2.3	Beach Parks and Shoreline Areas .....	3-34
15	3.3.2.4	Maintenance and Management of Parks, Recreation Areas	
16		and Recreational Resources.....	3-35
17	3.3.2.5	Site Design of Recreational Facilities.....	3-35
18	3.3.2.6	Recreational Activities That Support The North Shore's	
19		Economy.....	3-36
20	3.3.3	Relation to Open Space Map and Land Use Map .....	3-37
21	3.4	HISTORIC AND CULTURAL RESOURCES .....	3-37
22	3.4.1	Policies .....	3-38
23	3.4.2	Guidelines .....	3-38
24	3.5	RESIDENTIAL COMMUNITIES.....	3-39
25	3.5.1	Policies .....	3-42
26	3.5.2	Guidelines .....	3-43
27	3.5.2.1	Rural.....	3-44
28	3.5.2.2	Rural Residential .....	3-44
29	3.5.2.3	Low-Density Apartment.....	3-46
30	3.5.2.4	Special Needs Housing.....	3-47
31	3.5.3	Relation to Land Use Map.....	3-47
32	3.6	COMMERCIAL AREAS .....	3-48
33	3.6.1	Policies .....	3-48
34	3.6.2	Country Towns.....	3-49

1	3.6.2.1	Policies .....	3-52
2	3.6.2.2	Guidelines – Hale‘iwa Country Town .....	3-52
3	3.6.2.3	Guidelines - Waialua Country Town.....	3-54
4	3.6.3	Rural Community Commercial Center .....	3-57
5	3.6.3.1	Policies .....	3-57
6	3.6.3.2	Guidelines.....	3-57
7	3.6.4	Country Stores .....	3-58
8	3.6.4.1	Policies .....	3-59
9	3.6.4.2	Guidelines.....	3-59
10	3.6.5	Relation to Land Use Map.....	3-59
11	3.7	INDUSTRIAL AREAS .....	3-60
12	3.7.1	Policies .....	3-60
13	3.7.2	Guidelines .....	3-61
14	3.7.3	Relation to Land Use Map.....	3-62
15	3.8	VISITOR ACCOMMODATIONS.....	3-62
16	3.8.1	Policies .....	3-64
17	3.8.2	Guidelines .....	3-64
18	3.8.3	Relation to Land Use Map.....	3-65
19	3.9	INSTITUTIONAL USES .....	3-66
20	3.9.1	Policies .....	3-66
21	3.9.2	Guidelines .....	3-66
22	3.9.3	Relation to Land Use and Public Facilities Maps.....	3-66
23	3.10	MILITARY .....	3-66
24	3.10.1	Policies .....	3-67
25	3.10.2	Guidelines .....	3-67
26	3.10.3	Relation to Land Use Map.....	3-67
27	<b>CHAPTER 4.</b>	<b>PUBLIC FACILITIES AND INFRASTRUCTURE POLICIES AND</b>	
28		<b>GUIDELINES .....</b>	<b>4-1</b>
29	4.1	TRANSPORTATION SYSTEMS.....	4-2
30	4.1.1	Roadway Network.....	4-2
31	4.1.2	Transit (Bus Service) System.....	4-4
32	4.1.3	Bikeway System.....	4-5
33	4.1.4	Other Transportation Facilities .....	4-8
34	4.1.5	Policies .....	4-8



1	4.1.6	Guidelines .....	4-9
2	4.2	WATER SYSTEMS .....	4-11
3	4.2.1	Policies .....	4-14
4	4.2.2	Guidelines .....	4-16
5	4.3	WASTEWATER TREATMENT .....	4-16
6	4.3.1	Policies .....	4-17
7	4.3.2	Guidelines .....	4-18
8	4.4	ELECTRICAL SYSTEMS .....	4-18
9	4.4.1	Policies .....	4-19
10	4.5	SOLID WASTE HANDLING AND DISPOSAL.....	4-19
11	4.5.1	Policies .....	4-20
12	4.5.2	Guidelines .....	4-21
13	4.6	DRAINAGE SYSTEMS.....	4-21
14	4.6.1	Policies .....	4-22
15	4.6.2	Guidelines .....	4-22
16	4.7	SCHOOL FACILITIES .....	4-23
17	4.7.1	Policies .....	4-25
18	4.7.2	Guidelines .....	4-25
19	4.8	PUBLIC SAFETY FACILITIES.....	4-26
20	4.8.1	Policies .....	4-27
21	4.8.2	Guidelines .....	4-28
22	4.9	OTHER COMMUNITY FACILITIES .....	4-29
23	4.9.1	Policies .....	4-29
24	<b>CHAPTER 5.</b>	<b>IMPLEMENTATION .....</b>	<b>5-1</b>
25	5.1	PUBLIC FACILITY INVESTMENT PRIORITIES .....	5-2
26	5.2	DEVELOPMENT PRIORITIES .....	5-2
27	5.3	SPECIAL AREA PLANS .....	5-2
28	5.4	FUNCTIONAL PLANNING.....	5-3
29	5.5	REVIEW OF ZONING AND OTHER DEVELOPMENT APPLICATIONS.....	5-4
30	5.5.1	Adequate Facilities Requirement.....	5-5
31	5.6	FIVE-YEAR SUSTAINABLE COMMUNITIES PLAN REVIEW .....	5-5
32	5.6.1	Adoption of the Sustainable Communities Plan and Existing Land Use	
33		Approvals .....	5-5
34	5.7	Implementation Matrix .....	5-6

1 APPENDIX A: OPEN SPACE, LAND USE, AND PUBLIC FACILITIES MAPS..... A-1



## LIST OF EXHIBITS

EXHIBIT	TITLE	PAGE
1.1	General Plan Designations .....	1-4
2.1	Community Growth Boundary .....	2-5
3.1	Environmental Resources/Characteristics .....	3-3
3.2	Recreational Resources .....	3-29
3.3	Haleʻiwa and Waialua Country Town Districts.....	3-51
4.1	North Shore Bikeway System .....	4-6
4.2	Waialua-Haleʻiwa Pedestrian/Bikeway System .....	4-7

## LIST OF TABLES

TABLE	TITLE	PAGE
3-1	City and County of Honolulu Zoning Districts, 1998 and 2007 .....	3-5
3-2	State DLNR Forest Reserves and Natural Area Reserves.....	3-8
3-3	Major Wetland Areas .....	3-12
3-4	Major Gulches and Streams .....	3-14
3-5	City and County of Honolulu Beach Parks .....	3-27
3-6	National and State Register of Historic Places.....	3-37
3-7	North Shore Housing Trends: 1990 to 2000.....	3-40
3-8	Density and Height Guidelines by Residential Category .....	3-43
4-1	2005 Groundwater Use by Aquifer (mgd).....	4-12
4-2	Potential Groundwater Sources of Potable Water for the North Shore .....	4-13
4-3	Potential Alternative Nonpotable Water for the North Shore .....	4-14
4-4	Public School Enrollment and Capacity, North Shore .....	4-24
5-1	Implementation Matrix .....	5-7

## LIST OF ACRONYMS

ALISH	Agricultural Lands of Importance to the State of Hawai'i
BFS	Department of Budget and Fiscal Services
BMPs	Best Management Practices
BWS	Honolulu Board of Water Supply
CIP	Capital Improvement Program
City OED	City Office of Economic Development
CLP	Coastal Lands Program
COEMAP	Coastal Erosion Management Plan
CWRM	Commission on Water Resource Management
CZM	Coastal Zone Management
DBEDT	State Department of Business, Economic Development and Tourism
DCS	Department of Customer Services
DDC	Department of Design and Construction
DEM	Department of Emergency Management
DES	Department of Emergency Services
DFM	Department of Facility Maintenance
DLNR	State Department of Land and Natural Resources
DOA	State Department of Agriculture
DOE	State Department of Education
DOH	State Department of Health
DOT	State Department of Transportation
DPP	Department of Planning and Permitting
DPR	Department of Parks and Recreation
DTS	Department of Transportation Services
EA / EIS	environmental assessment / environmental impact statement
ENV	Department of Environmental Services
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact



HAR	Hawai'i Administrative Rules
HBMP	Hawai'i Beach Management Plan
HECO	Hawaiian Electric Company
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HPHA	Hawai'i Public Housing Authority
HRS	Hawai'i Revised Statutes
IAL	Important Agricultural Lands (Act 183, 2005)
LUC	Land Use Commission
LUO	Land Use Ordinance
mgd	million gallons per day
OMPO	O'ahu Metropolitan Planning Organization
OTS	O'ahu Transit Services
OWMP	O'ahu Water Management Plan
PIM	Public Infrastructure Map
PUC	Public Utilities Commission
ROH	Revised Ordinances of Honolulu
STIP	State Transportation Improvement Program
Tax Dept.	State Department of Taxation
TBD	To Be Determined
TMDL	Total Maximum Daily Load
UH	University of Hawai'i
USACE	U.S. Army Corps of Engineers
WMP	Watershed Management Plan
WO SWCD	West O'ahu Soil and Water Conservation District

# PREFACE

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The North Shore Sustainable Communities Plan has been prepared in accordance with the Charter-prescribed requirements for development plans, and is to be accorded force and effect as such for all Charter- and ordinance-prescribed purposes. It is one of eight community-oriented plans intended to help guide public policy, investment, and decision-making over the next 25 years. Each of these plans addresses one of eight planning regions on O‘ahu, responding to specific conditions and community values of each region.

Two of the planning regions, ‘Ewa and the Primary Urban Center, are areas where major growth in population and economic activity will be directed over the next 25 years and beyond. The plans for these regions are entitled “Development Plans,” to indicate their role as the policy guides for development decisions and actions needed to support that growth.

The remaining six planning regions, including North Shore, are envisioned to remain relatively stable. The plans for these regions are entitled “Sustainable Communities Plans” and are focused on serving as policy guidelines in support of that goal. The vision statements and supporting provisions for these plans are oriented toward maintaining and enhancing each region’s ability to sustain its suburban or rural character and lifestyle.

There has been a recent surge in widespread community discussions, actions and laws adopted to address sustainability. In 2005, the State Legislature convened a statewide group to draft a Hawai‘i 2050 Plan, with the primary purpose to provide policy recommendations for creating a sustainable Hawai‘i. In 2007, the State established a policy framework and requirements to reduce Hawai‘i’s greenhouse gas emissions to or below the 1990 levels by the year 2020 (Act 234, 2007). Public service announcements dealing with conserving water and electricity abound. The concept of buildings that are designed, built and occupied with environmental considerations at the forefront largely did not exist when the original Development Plans and Sustainable Communities Plans were first adopted. This setting raises the question about the role of such plans. Are they the City’s version of a sustainability plan? The answer is that they are the land development portion of a larger blueprint for sustainability.

As discussed below, the General Plan sets long-term goals for the City and County of Honolulu, across 11 major elements. Perhaps its most substantive chapter deals with population, and hence land development distribution. It sets the growth management strategy for O‘ahu. The Development Plans and Sustainable Communities Plans provide more detail on this land management strategy, assuring that how we use the land now, and in the future, responds to the three major elements of a Sustainable Place: economic health, social equity, and environmental protection. The issues addressed either directly or indirectly by these regional plans certainly overlap with other planning responsibilities of other departments, such as water



1 delivery and consumption, crime reduction, increasing public health, and developing responsive  
2 transportation systems. Collectively, these efforts comprise the strategy of developing a  
3 sustainable future for O'ahu.  
4

## 5 **P.1 THE SUSTAINABLE COMMUNITIES PLAN PROCESS**

6

7 This document is the culmination of a planning effort led by the City and County of Honolulu's  
8 Department of Planning and Permitting. This effort comprised a process that encouraged and  
9 enabled significant involvement from the region's neighborhood boards, community  
10 associations, business leaders, religious and cultural organizations, private landowners,  
11 institutions and numerous individuals. In its final form, this plan will have incorporated input  
12 received from the Planning Advisory Committee, three community-wide meetings, and a number  
13 of meetings with community leaders and representatives of government agencies.  
14

## 15 **P.2 HONOLULU LAND USE PLANNING AND MANAGEMENT** 16 **SYSTEM**

17

18 The City and County of Honolulu guides and directs land use and growth through a three-tier  
19 system of objectives, policies, planning principles, guidelines and regulations. The General  
20 Plan forms the first tier of this system. First adopted by resolution in 1977, the General Plan is a  
21 relatively brief document, consisting primarily of brief statements of objectives and policies. It  
22 has been amended several times, but the basic objectives and policies set forth in the 1977  
23 Plan remain intact.  
24

25 The second tier of the system is formed by the Development Plans and Sustainable  
26 Communities Plans, which are adopted and revised by ordinance. These plans address eight  
27 geographic regions of the island, including the Primary Urban Center, East Honolulu, Central  
28 O'ahu, 'Ewa, Wai'anae, North Shore, Ko'olau Loa and Ko'olau Poko.  
29

30 The third tier of the system is composed of the implementing ordinances, including the Land  
31 Use Ordinance (Honolulu's zoning code) and the City's Capital Improvement Program.  
32 Mandated by the City Charter, these ordinances constitute the principal means for implementing  
33 the City's plans. These ordinances are required to be consistent with the General Plan, the  
34 Development and Sustainable Communities Plans, and each other.  
35

36 In addition to these three Charter-mandated tiers, the Development Plans and Sustainable  
37 Communities Plans are supplemented by two planning mechanisms that are not required by the  
38 Charter, including the functional planning process and special area planning. Functional  
39 planning activities, some of which are mandated by state or federal regulations, provide long-  
40 range guidance for the development of public facilities such as water, wastewater disposal, and

1 transportation. Special area plans are intended to give specific guidance for neighborhoods,  
2 communities or specialized resources.

### 3 4 **P.3 AUTHORITY OF THE DEVELOPMENT PLANS AND** 5 **SUSTAINABLE COMMUNITIES PLANS**

6  
7 The authority for the Development Plans and Sustainable Communities Plans (herein referred to  
8 as “Development Plans” for simplicity) is derived from the City Charter, which mandates  
9 preparation of a General Plan and Development Plans to guide “the development and  
10 improvement of the city.” Together with the General Plan, the Development Plans provide  
11 policy guidance for the land use and budgetary actions of the City. This is the authority the  
12 originally adopted Development Plans carried, and it remains unchanged.

13  
14 The Charter provides that “public improvement projects and subdivision and zoning ordinances  
15 shall be consistent with the development plan for that area.” Although the Development Plans  
16 are not themselves regulatory, they “regulate the regulators.” They are policy tools and are to  
17 be used, in conjunction with the programs and budgets of the City, to accomplish the objectives  
18 of the City and as guides for the decisions made in the private sector.

### 19 20 **P.4 1992 CHARTER AMENDMENT TO REVISE THE DEVELOPMENT** 21 **PLANS**

22  
23 In 1992 the City Charter Commission recommended, and the voters of Honolulu adopted,  
24 amendments to the City Charter. Chief among its findings, the Charter Commission concluded  
25 that the Development Plans were overly detailed and had created processes that duplicated the  
26 zoning process. To eliminate this unnecessary duplication, the 1992 Charter amendments  
27 changed the definition of Development Plans from “relatively detailed plans” to “conceptual  
28 schemes.”

29  
30 The 1992 Charter amendments established that the purpose of the Development Plans is to  
31 provide:

- 32  
33 • “priorities ... (for the) coordination of major development activities”; and  
34  
35 • sufficient description of the “desired urban character and the significant natural, scenic  
36 and cultural resources ... to serve as a policy guide for more detailed zoning maps and  
37 regulations and public and private sector investment decisions.”  
38

1 In response to the 1992 Charter amendments, the Planning Department launched a thorough  
2 review of the Development Plans. The goal of that review was the revision of all eight of the  
3 Development Plans to bring them into conformance with the Charter-mandated conceptual  
4 orientation. The revised plan presented in this document conforms to that mandate.  
5

# EXECUTIVE SUMMARY

---

For many O‘ahu residents and visitors, the North Shore represents “the country,” where people go to find a laid-back island setting reminiscent of O‘ahu’s plantation days. In contrast to urban Honolulu’s metropolitan setting, the North Shore is known for its colorful scenery and unspoiled natural beauty, including world-famous surf, scenic shoreline and white sand beaches, picturesque valleys and coastal *pali*, and vast, open expanses of agricultural lands set against dramatic mountain backdrops. Hale‘iwa and Waialua, the region’s two rural towns, still feature a country atmosphere with low-density residential structures and low-rise buildings housing retail establishments, restaurants, and surf shops. As Honolulu and its suburban areas continue to grow and become increasingly urbanized, it has become more important to maintain the North Shore as an essential haven and respite from the urbanized areas of O‘ahu.

This plan is organized in five chapters and an appendix, as follows:

- **Chapter 1: North Shore’s Role in O‘ahu’s Development Pattern** defines the region’s role and identity within the overall framework of islandwide planning and land use management.
- **Chapter 2: The Vision for North Shore’s Future** summarizes the community’s vision for the future of the region, and describes important elements of that vision.
- **Chapter 3: Land Use Policies and Guidelines** is the Plan’s policy core. It provides policy guidance for the region’s various land use elements.
- **Chapter 4: Public Facilities and Infrastructure Policies and Guidelines** outlines policies and guidelines to support the land use policies of Chapter 3.
- **Chapter 5: Implementation** addresses needs for carrying out provisions outlined by the Plan.

The key recommendations contained in each chapter are summarized in the following section:

## E.1 CHAPTER 1: NORTH SHORE’S ROLE IN O‘AHU’S DEVELOPMENT PATTERN

Chapter 1 provides an overview of the relationship between O‘ahu’s General Plan, and the County’s development plans and sustainable communities plans, and provides specific context for the North Shore Sustainable Communities Plan within this land use paradigm. Consistent

1 with the directed growth policies of the City's General Plan, the role of the North Shore is to  
2 maintain the rural character, agricultural lands, open space, natural environment, recreational  
3 resources and scenic beauty of O'ahu's northern coast. In line with the General Plan's policies  
4 to preserve the open space and country atmosphere of the rural areas, growth is limited to "infill"  
5 areas within or adjacent to built-up areas to accommodate existing and future housing and  
6 employment needs.

## 8 **E.2 CHAPTER 2: THE VISION FOR THE NORTH SHORE'S FUTURE**

9  
10 This chapter presents the overarching concepts and goals of the North Shore Sustainable  
11 Communities Plan. It includes the Vision Statement for the long-range future of the region, and  
12 the Key Vision Elements that the policies and guidelines in this Plan are based upon.

13  
14 The North Shore's Vision Statement focuses on retaining the unique qualities that have defined  
15 the region's attractiveness to residents and visitors alike; scenic open spaces, coastal  
16 resources, and the community's cultural and plantation heritage. A stable and diverse  
17 agriculture industry, which includes crop production, agricultural processing, and other support  
18 facilities, will play a key role in the region's economy and in protecting the region's agricultural  
19 lands and open space setting. Hale'iwa and Waialua remain the North Shore's principal  
20 commercial and civic centers while retaining their historic and "country town" character. The  
21 region will remain "country," with wide open space, vistas, and rural communities. Growth will  
22 be limited to Hale'iwa and Waialua.

## 24 **E.3 CHAPTER 3: LAND USE POLICIES AND GUIDELINES**

25  
26 Chapter 3 presents policies and guidelines for the principal types of land uses on the North  
27 Shore. The Vision for the North Shore's future described in Chapter 2 is to be implemented  
28 through the application of these policies and guidelines. A summary of the major policies  
29 related to each land use type is below:

### 31 **E.3.1 Open Space and Natural Environment**

32  
33 Emphasis for the policies and guidelines for Open Space and the Natural Environment is placed  
34 on an integrated approach to resource management that underscores the Native Hawaiian  
35 concept of "*ahupua'a*." Consistent with this approach, preservation and protection of valued  
36 natural features, sensitive lands, agricultural lands and recreational areas are highlighted.

### **E.3.2 Agriculture**

The policies and guidelines related to Agriculture recognize the importance of protecting productive agricultural land; encourage the development of regional support facilities and infrastructure; and emphasize the importance of prohibiting improper use and subdivision of agricultural land.

### **E.3.3 Parks and Recreation**

Policies and guidelines for Parks and Recreation stress the protection and expansion of recreational resources; the provision of integrated pedestrian and bicycle facilities; the compatibility of recreational resources and activities within the surrounding environment; and connecting expenditures for recreational resources to actual usage of the facilities.

### **E.3.4 Historic and Cultural Resources**

The North Shore Sustainable Communities Plan emphasizes the importance of historic and cultural resources as an integral fabric of the North Shore community and underscores the need to properly identify these resources and protect them from development so they can be preserved for future generations.

### **E.3.5 Residential Communities**

The policies and guidelines related to Residential Communities clarify the importance of maintaining the Community Growth Boundary and directing the development of new housing units to areas in and around Hale'iwa and Waialua. A mix of housing units is desired to meet the needs of all North Shore residents, in a manner consistent with rural design and principles of sustainability.

### **E.3.6 Commercial Areas**

Guidance for Commercial Areas is focused on respecting rural design guidelines to maintain rural character, including appropriate scale. Importance is also placed on limiting new commercial development to areas within existing commercial districts.

### **E.3.7 Industrial Areas**

The importance of Industrial Areas that are compatible with the character of the North Shore is a primary focus of the North Shore Sustainable Communities Plan. The policies and guidelines



1 emphasize that industrial areas should support regional lifestyles while maintaining  
2 environmental balance, and providing economic opportunities as well as goods and services for  
3 area residents. Preservation of the former Waialua Mill site is also important.  
4

### 5 **E.3.8 Visitor Accommodations**

6  
7 The policies and guidelines for Visitor Accommodations emphasize the importance of a rural  
8 lifestyle on the North Shore, and the desire to avoid impacts on residents associated with both  
9 increased and illegal visitor units. Provisions are supported that would allow small-scale visitor  
10 accommodations in Hale'iwa with appropriate regulatory review and approval. No new resort  
11 zoning is supported for the North Shore.  
12

### 13 **E.3.9 Institutional Uses**

14  
15 Policies and guidelines related to Institutional Uses support convenient public services  
16 consistent with the rural character of the region, which make efficient use of available land.  
17

### 18 **E.3.10 Military**

19  
20 Policies and guidelines in this section provide for the maintenance of military installations, and  
21 encourage these areas to be maintained in a consistent manner with applicable general policies  
22 for residential, industrial, commercial, and other related uses.  
23

## 24 **E.4 CHAPTER 4: PUBLIC FACILITIES AND INFRASTRUCTURE** 25 **POLICIES AND GUIDELINES**

26  
27 This chapter presents the policies and guidelines related to public facilities and infrastructure  
28 systems in the North Shore. General policies related to each facility type are summarized  
29 below:  
30

### 31 **E.4.1 Transportation Systems**

32  
33 Transportation Systems are a key element of the North Shore Sustainable Communities Plan  
34 and emphasize a variety of policies and guidelines, including: retaining Kamehameha and  
35 Farrington Highways as two-lane thoroughfares; improving mobility and connectivity for area  
36 residents; supporting multi-modal systems to reduce automobile dependency; and ensuring that  
37 existing roadways can accommodate development prior to construction.  
38

## **E.4.2 Water Systems**

This section of Chapter 4 provides an overview of the protection and regulation of water resources at the State and County levels, including the preparation of regional watershed management plans for O'ahu by the Board of Water Supply. Policies and guidelines emphasize the importance of responsible management of water resources; the need for useful water conservation measures (including recycling); the relationship between the health of the agricultural economy and the availability of adequate irrigation sources; and the protection of all water sources from pollutants.

## **E.4.3 Wastewater Treatment**

Policies and guidelines for Wastewater Treatment call for the provision of adequate public and private wastewater treatment facilities and improvements to the existing wastewater management services to protect the North Shore's water resources and the health of the community, and support for alternative wastewater technologies that reflect the community's values and rural character.

## **E.4.4 Electrical Systems**

Policies and guidelines for Electrical Systems emphasize the importance of adequate and reliable electric service, the need for visually compatible facilities, and support for the use of renewable energy sources and conservation measures.

## **E.4.5 Solid Waste Handling and Disposal**

The section on Solid Waste Handling and Disposal focuses on providing adequate resources for trash removal, cleanup of illegal dumps, and enforcement of antidumping laws, in addition to stressing the continued importance of recycling and other source reduction programs dedicated to minimizing the amount of solid waste generated.

## **E.4.6 Drainage Systems**

Policies and guidelines for Drainage Systems call for improvements to mitigate storm runoff and to provide adequate protection from flooding, with an emphasis on low-impact design strategies that minimize nonpoint source pollution and support the retention of storm water on-site and in wetlands.

## **E.4.7 School Facilities**

Language in this section calls for the provision and maintenance of school facilities that serve the needs of the community, and a desire to integrate school facilities with other community uses.

## **E.4.8 Public Safety Facilities**

Policies and guidelines for Public Safety Facilities promote an integrated approach to public safety, which enables police, fire, ocean safety, civil defense, and emergency medical efforts to share resources and information, as appropriate, and adequate staffing and facilities to ensure effective and efficient delivery of basic government services and protection of public safety.

## **E.5 CHAPTER 5: IMPLEMENTATION**

This chapter discusses the various measures that support implementation of this Plan, including the regulatory mechanisms, physical improvements, and other actions that are needed to realize the Plan's vision. Section 5.7 presents an Implementation Matrix to help organize and facilitate plan implementation. The Implementation Matrix, which is based on the policies and guidelines presented in Chapters 3 and 4, identifies the specific actions, corresponding plans and/or codes, and public and private entities responsible for implementation.

## **E.6 APPENDIX A**

The appendix contains three color maps that illustrate some of the plan's textual provisions. These maps are intended to be conceptual illustrations of the text, and should be considered secondary to the policies and guidelines articulated in the text.

# 1. NORTH SHORE'S ROLE IN O'AHU'S DEVELOPMENT PATTERN

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The North Shore Sustainable Communities Plan area extends from Ka'ena Point in the west to Waiale'e Gulch near Kawela Bay in the east, with O'ahu's shoreline defining the northern edge and Helemano and the slopes of the Wai'anae and Ko'olau Mountain Ranges to the south. The region consists mostly of agricultural lands and open space, which surround the country towns of Hale'iwa and Waialua and the rural residential communities of Mokulē'ia, Kailua, and Sunset/Pūpūkea.

A number of distinguishing characteristics help define the North Shore's role within the City and County of Honolulu. In contrast to urban Honolulu's metropolitan setting, the North Shore is known for its colorful scenery and unspoiled natural beauty, including world-famous surf, scenic shoreline and white sand beaches, picturesque valleys and coastal *pali*, and vast, open expanses of agricultural lands set against dramatic mountain backdrops. For many O'ahu residents and visitors, the North Shore represents "the country," where people go to find a laid-back island setting reminiscent of O'ahu's plantation days. The North Shore's Native Hawaiian heritage, cultural diversity, and plantation past are reflected in its small rural communities, and its agricultural landscapes and open space resources. Hale'iwa and Waialua, the region's two rural towns, still feature a country atmosphere with low-density residential structures and low-rise buildings housing retail establishments, restaurants, and surf shops. For many, the North Shore is a place for rest and recreation that offers opportunities to enjoy the country atmosphere, numerous white sand beaches, and mountain areas. As Honolulu and its suburban areas continue to grow and become increasingly urbanized, it has become more important to maintain the North Shore as an essential haven and respite from the urbanized areas of O'ahu.

The General Plan directs growth to the Primary Urban Center, Central O'ahu and 'Ewa regions of O'ahu and limits growth in the urban fringe and rural areas (Exhibit 1.1). It designates the North Shore as a rural area where physical growth and development will be managed so that "an undesirable spreading of development is prevented," and "population densities are consistent with the character of development and environmental qualities desired for the area" (General Plan of the City and County of Honolulu, page 15). The General Plan also specifies that agricultural lands along the Windward, North Shore, and Wai'anae coasts are to be maintained for diversified agriculture.

In this context, the role of the North Shore Sustainable Communities Plan is to maintain the rural character, agricultural lands, open space, natural environment, recreational resources and scenic beauty of O'ahu's northern coast, in contrast to more urbanized areas of O'ahu such as the Primary Urban Center, East Honolulu, Central O'ahu, and 'Ewa. In line with the General

Plan's policies to preserve the open space and country atmosphere of the rural areas, the North Shore Sustainable Communities Plan limits growth to "infill" areas within or adjacent to built-up areas to accommodate existing and future housing and employment needs, and strives to maintain the region's population at 1.7 percent of the island-wide population for the year 2025<sup>1</sup>.

This plan reaffirms the North Shore's role as a rural area by establishing the following policies for future land use in the North Shore Sustainable Communities Plan area:

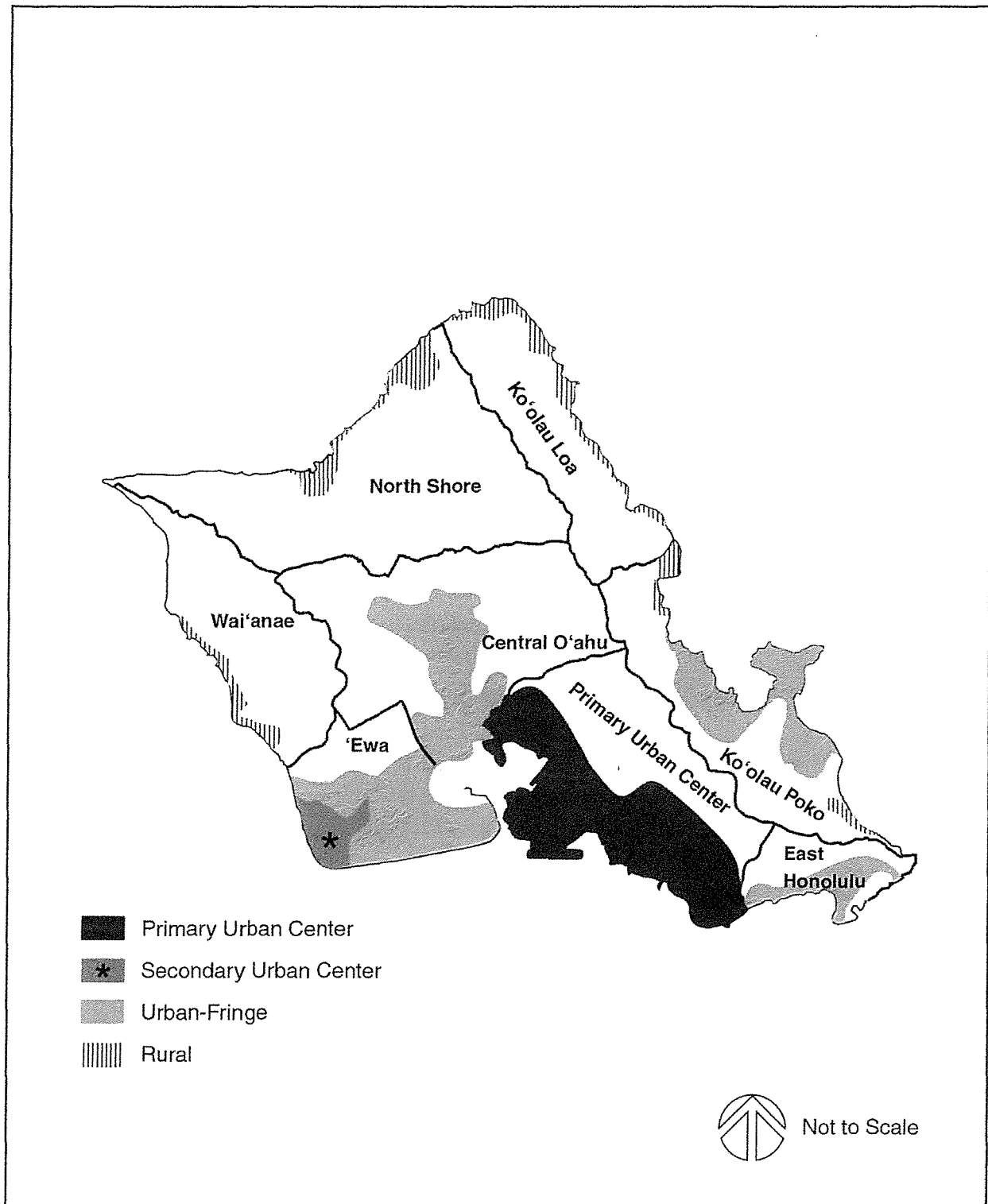
- Maintain the region's rural character by promoting diversified agriculture, preserving scenic open space, and retaining the small-town, country atmosphere of the region's typically low-rise, low-density communities.
- Preserve agricultural lands for current and future agricultural uses and support the diversified agriculture industry.
- Protect and preserve the natural environment and natural resources and features, including: mountain, forest and watershed areas; marshes, rivers, and streams; shoreline areas, fishponds, and bays; and reefs and offshore islands.
- Preserve scenic views of the mountains, coastal *pali* and shoreline areas including *mauka* and *makai* views seen from near shore waters and heavily traveled areas such as Kamehameha Highway, Farrington Highway and Kaukonahua Road.
- Protect cultural, historical, and archaeological resources by promoting the interpretive and educational use of these sites, buildings, and artifacts.

<sup>1</sup> General Plan for the City and County of Honolulu, Section I: Population Objective C Policy 4 (Amended, Resolution 02-205, CD1) seeks a 2025 distribution of O'ahu's residential population as follows:

Distribution of Residential Population	
LOCATION	% SHARE OF 2025 ISLANDWIDE POPULATION
Primary Urban Center	46.0%
'Ewa	13.0%
Central O'ahu	17.0%
East Honolulu	5.3%
Ko'olau Poko	11.6%
Ko'olau Loa	1.4%
North Shore	1.7%
Wai'anae	4.0%
TOTAL	100.0%

- 1 • Manage and sustain ocean and nearshore resources to assure their long-term  
2 availability.
- 3
- 4 • Enhance opportunities for a wide range of recreational activities by providing community-  
5 based as well as natural resource-based parks, and by securing convenient public  
6 access, including public right-of-ways, bikeways, and pedestrian walkways to beaches  
7 and inland recreation areas.
- 8
- 9 • Facilitate the country lifestyle by establishing rural design guidelines emphasizing open  
10 space, landscaping, and the scenic qualities of an area, so that new development will be  
11 in keeping with the desired rural character of the region.
- 12
- 13 • Support businesses which serve the agricultural, educational, health, and tourist  
14 industries and the local population, and provide employment for North Shore residents  
15 consistent with the low-key rural atmosphere of the North Shore.
- 16
- 17 • Provide sufficient lands adjacent to built areas of Hale'iwa and Waialua for housing that  
18 is compatible with the region's rural character and affordable to area residents, without  
19 exceeding the General Plan's population guidelines for the region and remaining in line  
20 with General Plan policies to maintain the North Shore as a rural area.
- 21





**Exhibit 1.1: General Plan Designations**

## 2. THE VISION FOR THE NORTH SHORE'S FUTURE

---

This chapter presents the vision for North Shore's future and describes the key elements of this vision. Based on community input and the General Plan's policies for the region, the Vision provides the basis for the Sustainable Communities Plan's policies and guidelines, which, in turn, will direct future land use decisions and natural resource management policies and programs on the North Shore.

The Vision for the North Shore extends to the year 2035, during which time the North Shore is projected to experience very little growth. The region will remain "country," with wide open spaces, agricultural lands and rural communities defining the regional landscape, and growth limited to Hale'iwa and Waialua Towns. Based on the General Plan's population distribution policy, the North Shore's population is projected to account for 1.7 percent of the island-wide population in 2025.

Following World War II and the resultant tourism boom on O'ahu, the North Shore has experienced a steady increase in population. In 1970, the North Shore's population was about 9,200 people, accounting for an estimated 1.4 percent of O'ahu's total population. By 2000, the North Shore's population doubled to nearly 18,400 people, accounting for about 2.0 percent of the island-wide population. Projections from the City's Department of Planning and Permitting (DPP) indicate an estimated 19,517 persons residing in the region in the year 2035.<sup>2</sup> Assuming that the region's population growth rate will continue at the same pace over the next 25 years, DPP projections indicate that there would be about 1,800 more people in the region by 2035 (based on the projected 2010 residential population of 17,724). At more than 1.8 percent of the 2035 projected island-wide population of 1,038,317 residents, the North Shore's 2035 projected residential population would be slightly more than the General Plan's population distribution policy for the North Shore (1.7 percent of the island-wide population). Although the projected regional population growth seems relatively minor when compared with the projected 2035 island-wide population (20,430 and 1,113,620 persons, respectively), many North Shore residents feel that the additional population growth – when compared to the North Shore's current population – is substantial, and also largely inconsistent with the existing rural character and the community's future vision.

### 2.1 VISION STATEMENT

The vision statement for the North Shore describes the desired future conditions in the year 2035 and beyond. This section is written in the present tense, from the perspective of the year 2035 looking back into the past.

---

<sup>2</sup> Department of Planning and Permitting. "Socio-Economic Projections, Year 2035." September 2009.

1  
2 "The North Shore in the year 2035 retains the unique qualities that have long defined its  
3 attractiveness to residents and visitors alike. Scenic open spaces are protected and  
4 maintained, coastal resources are enhanced, and the region's Native Hawaiian heritage,  
5 cultural diversity, and plantation past have been carried forward in the revitalization of its  
6 communities.

7  
8 Agriculture is a major contributor to the North Shore's economy, providing a multitude of  
9 jobs and economic opportunities for area residents. A varied quilt work of crops and  
10 forest products defines vast tracts of agricultural lands. All of O'ahu's residents enjoy  
11 the agricultural products grown on the North Shore, and value the North Shore's ability  
12 to provide food for the island's population and reduce O'ahu's dependency on imported  
13 foods. Coastal waters, beaches, and parks are linked by walkways and bicycle routes  
14 creating an ideal backdrop to host a rich array of recreational pursuits. Mountain areas  
15 provide safe havens for native plants and wildlife as well as wilderness settings for  
16 appropriate backcountry recreation. Hale'iwa and Waialua are the region's principal  
17 commercial and civic centers, and small pockets of rural residential areas remain  
18 clustered around Mokulē'ia, Kawaihoa, and Sunset/Pūpūkea. Residents are proud of  
19 their close-knit communities and the many local families in their communities that have a  
20 history of multigenerational ties to the North Shore.

21  
22 The growth of a stable and diverse agriculture industry has ensured the long-term  
23 protection of the North Shore's agricultural lands and open space setting and supported  
24 an array of flourishing agricultural enterprises, including crop production, agricultural  
25 processing and other support industries, farmers' markets and agricultural specialty  
26 outlets. Along with the continued success of the visitor and recreational industries, the  
27 growth of the agriculture industry has resulted in further needs for conventional  
28 commercial and industrial services, and an increase in cottage industries.

29  
30 To maintain the region's rural character, these new activities are centered at Hale'iwa  
31 and Waialua. Hale'iwa continues to be the North Shore's regional commercial center,  
32 hosting a variety of specialty outlets, dining establishments, professional and business  
33 services, and water sport enterprises, along with low-key, small-scale, country-style  
34 visitor accommodations. Waialua is a renewed center for agricultural activity, boasting a  
35 revitalized town center for resident-focused commercial services and a resource center  
36 for technology education within its schools. While some of the needed new affordable  
37 housing has been located in Hale'iwa, most new residential neighborhoods are located  
38 at Waialua.

39  
40 Both towns retain their historic character and rural charm, while serving as the main  
41 employment centers for the region. Similarly, all new residential neighborhoods and

1 their supporting parks, playgrounds, and public services have been developed to  
2 standards which reflect their rural settings. In these ways, the North Shore of O‘ahu,  
3 long an attraction for Hawai‘i residents and visitors alike, has emerged in the year 2035  
4 as a thriving model rural community that successfully preserves its natural, cultural and  
5 historical heritage, links its past with the future, and blends “Old Hawai‘i” with the 21st  
6 century.”  
7

## 8 **2.2 KEY ELEMENTS OF THE VISION**

9

10 Each of the key elements of the vision is described in the following sections.  
11

### 12 **2.2.1 Maintain the Community Growth Boundary to Protect** 13 **Agricultural, Open Space, and Natural Resources** 14

15 The North Shore is characterized by vast tracts of agricultural lands, open spaces, and natural  
16 and cultural resources. To protect these resources from development, the Community Growth  
17 Boundary was established to guide development and preserve open space and agricultural  
18 areas. It has remained fixed since it was first established in 2000, and no new development has  
19 occurred outside the Community Growth Boundary. The Community Growth Boundary has  
20 served as a valuable tool to guide resource management, future development or redevelopment  
21 within existing zoning designations or future zoning designations, and other standards or  
22 guidelines that have been developed in response to plan provisions, other established  
23 entitlements, or in accordance with pertinent policy and character described in this plan.  
24

25 The Community Growth Boundary defines, protects, and contains communities in areas which  
26 the General Plan designates “rural” and which exhibit the physical characteristics of rural  
27 lifestyles. The boundary provides adequate lands for facilities needed to support established  
28 communities, and protects such communities from more intense land uses and patterns of  
29 development associated with more urban areas. The Community Growth Boundary also  
30 preserves areas outside the boundary for agriculture or other resource or open space values.  
31 Where appropriate, the area within this boundary also contains open space elements  
32 considered essential to the character of the rural community being defined. Open space  
33 elements within the Community Growth Boundary may include lands designated “Park,”  
34 “Agriculture,” “Preservation,” or areas with development-related hazards such as steep slopes  
35 or unstable soils.  
36

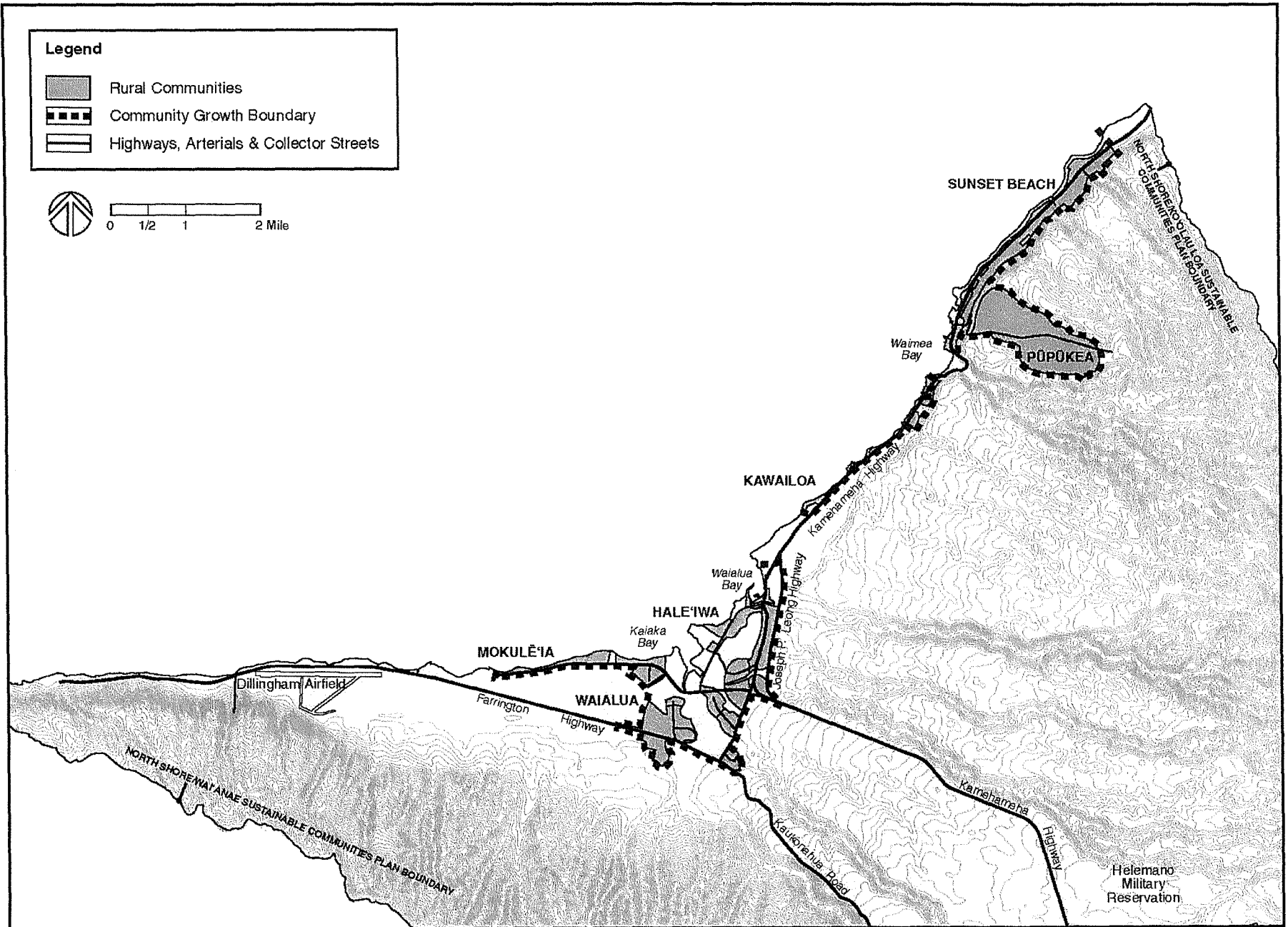
37 Rural communities defined by this boundary consist of residential communities and towns that  
38 are smaller, more dispersed, and less intensively developed than those in O‘ahu’s urban or  
39 urban fringe areas. Development character is generally low density, low rise, small scale, and  
40 reflective of a “country” setting. Within residential areas, the landscaping and front yards which

1 provide the foregrounds to their respective residences are the principal visual elements. In  
2 commercial areas, the pedestrian environment and associated amenities predominate, and  
3 storefronts are typically found on both sides of the street. Commercial buildings are oriented  
4 principally toward the street, relate readily to the human scale, and are organized to encourage  
5 interaction between the public and private domains.

6  
7 As shown on Exhibit 2.1, the Community Growth Boundary on the North Shore conceptually  
8 defines the limits of residential, commercial, industrial, or other similar uses. As no proposals  
9 for these types of uses can be considered outside the Community Growth Boundary, this  
10 boundary also prevents the encroachment of development onto agricultural lands and open  
11 space resources.

12  
13 Areas outside the Community Growth Boundary include agricultural lands as well as  
14 preservation lands with important open space, scenic, or natural resource values. Uses such as  
15 commercial and industrial development, public and private schools, and residential subdivisions  
16 with no bona fide agricultural activities are not permitted in these areas. Permissible land uses  
17 outside the Community Growth Boundary include agriculture and limited low-intensity types of  
18 outdoor recreational uses where appropriate, such as on nonagricultural lands or agricultural  
19 lands that are not suitable for intensive cultivation, provided they do not diminish the agricultural  
20 potential of these sites or jeopardize the open space, natural and scenic character of these  
21 resources. Other permitted uses outside the Community Growth Boundary include  
22 environmental and educational programs and facilities that are resource compatible, such as a  
23 high technology learning center that uses existing facilities at Camp Mokulē'ia and Camp  
24 Erdman in Mokulē'ia.

25  
26 Rural communities within the Community Growth Boundary include concentrations of  
27 residential, commercial, and industrial uses as well as the network of roads, parks, and open  
28 spaces which define their edges or give them character. Relative to the State Land Use District  
29 boundaries, the Community Growth Boundary generally circumscribes built-up sections of  
30 Mokulē'ia, Waialua, Hale'iwa, Kawaihoa, and Sunset Beach that are within the State Urban  
31 District. It also includes portions of the State Agricultural District in Sunset Hills and Pūpūkea  
32 that are zoned Country, as well as portions of the State Agricultural District *maka'i* of the  
33 highway in Hale'iwa and Waialua that are designated and zoned for agricultural use. However,  
34 except for limited "infill" areas in Hale'iwa and Waialua Towns that are contiguous to lands  
35 designated for residential and commercial use, agricultural lands within the Community Growth  
36 Boundary continue to remain in the State Agricultural District and continue to be designated and  
37 zoned as Agriculture, so as to maintain the agricultural uses and/or open space value within the  
38 Community Growth Boundary.



**Exhibit 2.1: Community Growth Boundary**  
North Shore Sustainable Communities Plan



Within this boundary, open space continues to define communities, and significant natural resources (such as streams, natural drainageways, wetlands, and fishponds) are protected. New development within the Community Growth Boundary has been limited to infill low-density, low-rise development contiguous to existing built areas, to promote a compact form of development with lower development costs and more efficient utilization of existing infrastructure systems. The infill areas within the Community Growth Boundary have had ample capacity to accommodate residential, commercial, and industrial needs to the year 2035.

## **2.2.2 Promote a Diversified Agricultural Industry**

A healthy agricultural industry continues to generate economic opportunities that are appropriate to the region's open space and rural qualities. In addition to using the Community Growth Boundary to ensure long-range protection for agricultural lands, land use policies and guidelines are in place to protect agricultural lands from encroachment by incompatible uses and to encourage long-term investments in productive agricultural uses on those lands. Economic incentives to support the industry, including tax or other incentives or measures to maintain productive agricultural lands, facilitate conversion from plantation crops to diversified agriculture, and promote long-term leases or sale of lands for farming, have been enhanced and strengthened.

Industrial and commercial activities which support or service agricultural production are creating further economic opportunities. To promote the cost-efficient use of existing infrastructure and prevent urbanization of agricultural lands, major agricultural support facilities have been consolidated in designated areas that are accessible to existing infrastructure. In addition, visitor-based activities that are accessory to agricultural operations are providing additional revenue-generating sources to supplement farm incomes. Qualified uses which meet specific criteria outlined in Section 3.2 are being allowed on a permit basis.

Agricultural support facilities at the former Waialua Mill site have been expanded into the area *makai* of the Mill, and the area is the primary agricultural support area for the region. A secondary agricultural support area in Kawaihoa near the Alluvion Nursery provides localized support for adjacent agricultural activities based in Kawaihoa.

## **2.2.3 Enhance the Region's Recreational and Educational Potential**

The North Shore is known for its numerous beach parks, world famous surf spots, and abundant *mauka* and *makai* resources. Recreational resources along the shoreline are preserved and enhanced, and access to the shoreline has been expanded. Facility improvements such as bathrooms, showers, and parking have been completed, and beach parks were expanded to meet island-wide demands on these resources. Maintenance and improvements to existing

1 beach parks, additional access to the shoreline, and acquisition of beach right-of-ways continue  
2 to be a priority.

3  
4 Access to the *mauka* areas has been expanded for appropriate forms of recreational  
5 opportunities that do not compromise significant environmental resources or important  
6 agricultural activities. Above Mokulē'ia, Hale'iwa, and Pūpūkea, *mauka* access has been  
7 expanded for hiking, camping, hunting, and horseback riding and other resource-compatible  
8 forms of recreation within the context of sound resource management.

9  
10 Low-impact, resource-sensitive environmental, educational, and cultural interpretive programs  
11 are being accommodated at Ka'ena Point and in the *mauka* areas of Mokulē'ia, Hale'iwa,  
12 Waimea and Pūpūkea. While promoting expanded access and recreational opportunities to  
13 coastal and *mauka* resources, the value of the resources remains protected from overuse. A  
14 high technology learning center is operating at Mokulē'ia, and a resource center for technology  
15 training and long-distance learning serves Waialua schools.

16  
17 More community-based parks for area residents with better maintenance and amenities to  
18 support the community's recreational needs are being provided. As new housing areas were  
19 developed in Waialua, Pu'uiki Park was acquired to serve as a community-based park for area  
20 residents. In Hale'iwa, the Hale'iwa Beach Park Mauka (commonly known as the Hale'iwa  
21 Regional Park) provides facilities for both active and passive recreational pursuits. In addition,  
22 an integrated system of pedestrian paths and bikeways links the parks, schools, and town  
23 centers in Waialua and Hale'iwa.

#### 24 25 **2.2.4 Promote Hale'iwa and Waialua Towns as "Country Towns"**

26  
27 Hale'iwa and Waialua Towns are the main commercial districts on the North Shore, each with  
28 different functions and distinct characteristics. The historic Hale'iwa Town with its "main street"  
29 ambience is the region's main commercial attraction for residents and visitors, while Waialua  
30 Town is a plantation town that primarily services the residents of Waialua and Mokulē'ia.

31  
32 To maintain their rural "small town" character and to promote compact town development, the  
33 cores of both towns are designated as "country towns." While the built environment within each  
34 town's core reflects the town's distinct historic character and the region's rural landscape, both  
35 towns are celebrated for the unique mix of commercial, residential, and compatible industrial  
36 uses (such as small product or clothing manufacturing and assembly).

37  
38 **Hale'iwa.** Hale'iwa Town features a diverse mix of shops and restaurants, professional and  
39 service businesses, enterprises with art and recreational themes, and specialty outlets featuring  
40 regional products. Entry features into the town, landscaping, pedestrian walkways, and off-

street parking behind buildings have spawned the town's revitalization, and new developments are concentrated along Kamehameha Highway. The Hale'iwa Special District Design Guidelines remain in force to ensure that all new development is compatible with existing built areas and the rural character of the region.

Small-scale visitor accommodations located within the Hale'iwa Country Town District provide overnight facilities for visitors wishing to vacation on the North Shore. These small scale visitor accommodations are one alternative to address community concerns about the illegal use of private homes as short-term vacation rentals. Short-term vacation rentals and the additional pressures such use places on surrounding residences have been addressed. Locational and performance criteria addressing the different types of visitor accommodations have been established and are actively enforced.

**Waialua.** Waialua Town is the quiet heart of the North Shore's residential and farming community, featuring the region's primary agricultural support area and a vibrant core with basic retail and commercial services and light industrial uses that support the local community. Although agricultural and light industrial businesses are the major employers in Waialua, the town's proximity to Ka'ena Point and the recreational opportunities in the area attracted recreational and environmental education activities to the area, including high technology and education industries that partner with area schools. Such partnerships have enhanced the quality of education and, along with the establishment of a private high school in the area, have created professional-level jobs for area residents. In addition, Waialua's central location and proximity to the schools and parks is ideal for locating civic and community services such as job training programs for the youth and support services for the elderly. To preserve its plantation heritage and rural character, design guidelines appropriate to Waialua Town are established.

The core of Waialua Town is centered around Goodale Avenue and Kealohanui Street. As envisioned in the Waialua Town Master Plan (2005), revitalization of the town's core has created a landscaped, pedestrian-oriented mall anchored by the Waialua Bandstand and the revitalized Waialua Mill site, an expanded farmers market, and community and commercial uses. Appropriate forms of small-scale, low-intensity tourist activities such as tours of nearby agricultural farms and processing facilities and recreational resources are helping to further revitalize the town's commercial center by attracting more people there.

## **2.2.5 Support Waialua as the North Shore's Industrial Center**

The Waialua Mill site has been reinforced as the industrial center for the region. In addition to industrial uses that support the agriculture industry, general industrial uses such as boat and car repair, surfboard manufacturing and repair, manufacturing of crafts and island products, and warehousing are thriving. Development of the former Mill and expansion *makai* of the Mill site

1 has encouraged more commercial activity and enhanced the physical connection between the  
2 Mill and Waialua's town core.

### 3 4 **2.2.6 Direct New Housing to Areas Contiguous to Hale'iwa and** 5 **Waialua Towns and Use Rural Design Guidelines for Rural** 6 **Residential Development**

7  
8 New residential development is located within designated areas adjoining Hale'iwa and Waialua  
9 Towns, with additional "infill" on or contiguous to existing lots in previously developed residential  
10 areas. New housing consists of a range of housing types and prices, including affordable  
11 housing that is allowing local residents to stay in the area. Attached and multifamily housing  
12 forms which were not traditionally associated with the rural setting have been developed, and  
13 the higher densities have supported the development of affordable housing. In Waialua, new  
14 housing has replaced the former mill camp once located between the Mill and Pu'uiki Road, and  
15 expanded into the area *mauka* of the mill camp between Pu'uiki Road and Goodale Avenue. In  
16 Hale'iwa, infill residential expansion has occurred north of Pa'ala'a Road on lands outside the  
17 flood plain.

18  
19 Rural design guidelines and development standards have been adopted to ensure compatibility  
20 with the region's rural character and surrounding open space. Rural models such as the  
21 plantation community at Poamoho Camp, which is characterized by clusters of single-story  
22 dwellings with landscaping, narrow streets, and common parks and open spaces within the  
23 neighborhood, were used as examples to follow.

24  
25 In addition to guidelines to limit building heights and lot coverage in order to maximize open  
26 space and landscaping, low-impact development principles that promote sustainable building  
27 design and alternative development options that allow for site design flexibility, creative site  
28 utilization, and open space preservation were adopted. Rural streetscape design that minimizes  
29 pavement surfaces and allows for grassed swales in place of sidewalks with curbs and gutters,  
30 as opposed to more urban and suburban models, is considered appropriate. Where feasible  
31 and appropriate, existing plantation homes were rehabilitated in a manner which allows them to  
32 be affordable to existing residents.

### 33 34 **2.2.7 Provide Adequate and Appropriately-Sized Public** 35 **Infrastructure, Facilities, and Services**

36  
37 Public agencies and private developers work together to provide adequate infrastructure and  
38 needed public facilities and services. Considering the large number of nonresidents that visit  
39 the North Shore and partake in the region's assets, additional resources to upgrade and

adequately maintain existing infrastructure systems and public facilities are being provided. Infrastructure does not detract from scenic amenities, recreational opportunities, open space, or other amenities.

Adequate, environmentally sensitive wastewater treatment systems that minimally impact groundwater and ocean resources and are consistent with the North Shore's rural character have replaced outdated and ineffective wastewater systems.

The quality of the North Shore's ground, surface, and nearshore waters is vital for ensuring public health, providing outdoor recreation, sustaining the integrity of ecological systems, and maintaining general environmental quality. In addition to drainage system improvements to mitigate storm runoff and regional flood hazards, adequate infrastructure for drainage systems has been established and is being maintained to ensure continuous runoff and protect the quality of coastal waters. Agricultural uses are implementing Best Management Practices (BMPs), including those recommended in the State Coastal Nonpoint Pollution Control Program, to minimize soil erosion.

An adequate circulation network that allows for efficient and safe travel supports all modes of transportation. Traffic on Kamehameha Highway between the heart of Hale'iwa Town and Waimea Bay flows freely since safety and operational deficiencies along the aged highway system were corrected. Kamehameha Highway remains a two-lane highway; no additional through lanes have been constructed, although improvements to reduce traffic impediments (for example, bicycle/pedestrian facilities to encourage the use of alternatives modes of transportation, dedicated storage/stacking turn lanes to minimize bottlenecks affecting emergency vehicle response time, turnouts and facility improvements to reduce the number of cars parked along the highway) have been completed. The provision of secondary/emergency access into and out of the region is also available. The transportation system encourages reduced automobile dependency, and includes an integrated network of bus routes, and pedestrian paths and bikeways that link the various residential communities, parks, schools, and the town centers of Hale'iwa and Waialua.

Other priority needs that have been addressed include retention of the public library in Waialua, maintenance of existing parks in the region, and adequate staffing and resources to ensure quality public safety services and protection from natural hazards. Use of proven renewable energy and energy conservation measures, including the use of solar energy systems and sustainable building technologies, is encouraged.

## 2.2.8 Preserve and Protect Cultural and Historic Resources

Preserving significant plantation era and other historic features such as at Hale'iwa Town, Waialua Town, the Waialua Mill, and other sites, as well as protecting Native Hawaiian cultural and archaeological sites, has been important in retaining the area's unique identity and country character. Historic site restoration and interpretive programs are integrated into the development of parks and shorelines and mountain access systems, to help enhance appreciation of these resources.

The North Shore has a wealth of historic and cultural resources signifying its rich history of land use that extends back to the precontact Native Hawaiian era. Native Hawaiians were the first known inhabitants of the region, arriving around 1100 A.D. and settling in villages built along valley floors, streams and shoreline areas. With an abundance of marine life, fertile soils, natural springs, and forest resources, the lands around Waialua and Kaiaka Bay are believed to have supported between 6,000 to 8,000 people prior to Western contact in the late 1700s. The concentration of archaeological and cultural sites remaining in the region indicates that the *moku* of Waialua was viewed as an important area to invoke and sustain *mana* (the spiritual force and energy that was integral to the religious, social and political well-being of the Native Hawaiian society.)<sup>3</sup>

Following the arrival of Western missionaries and the introduction of Western ideals in the early 1800s, there was a drastic reduction in the population of Native Hawaiians and their traditional land use practices. Like other places on O'ahu, Western entrepreneurs assumed control of large tracts of land for plantation agriculture purposes. With the establishment of the North Shore's first sugar cane plantation in 1865, plantation agriculture dominated the North Shore's economy for more than 100 years until the closure of the Waialua Sugar Mill in 1996. Most of the North Shore's present-day landscape – including the region's physical layout and formation of its towns and neighborhoods, its building forms and landmarks, sense of place, and demographic composition and social fabric of the community – have been influenced by the plantation and its distinctive lifestyle.

## 2.2.9 Adapt the Ahupua'a Concept as a Framework for Land Use and Natural Resource Management

Traditional Hawaiian life was based on the *ahupua'a* system of land management. An *ahupua'a*, or land division, was typically wedge-shaped and extended from the top of the mountain into the outer edge of the ocean reef. Defined by the natural geographic formations such as mountain ridges, gulches and streams, *ahupua'a* were complete ecological and

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<sup>3</sup> Kamehameha Schools Bishop Estate. North Shore Plan. 2008.



1 economic production systems that provided all the resources to sustain the community living  
2 within the *ahupua'a*. Fish and marine resources were harvested from the ocean, *kalo* (taro) and  
3 *'uala* (sweet potato) were raised in the lowlands, and upland areas provided trees and other  
4 forest products.  
5

6 The *mokupuni*, or island, of O'ahu is made up of six *moku*, or districts. There are two *moku* in  
7 the North Shore Sustainable Communities Plan area – the entire *moku* of Waialua and a portion  
8 of Ko'olau Loa. Waialua, the northwestern *moku*, extends from Ka'ena Point in the west to  
9 Kapaeloa at Waimea in the east. Ko'olau Loa is the northeastern *moku* that stretches from  
10 Waimea Bay to Ka'a'awa. The eighteen *ahupua'a* in the North Shore Sustainable Communities  
11 Plan area include: Ka'ena, Keālia, Kawaihāpai, Kikahi, Auku'u, Mokulēi'a, Kamananui, Pa'ala'a,  
12 Kawailoa, Lauhulu, Kuikuiloloa, Punanue, Kāpaeloa, Waimea, Pūpūkea, Paumalū, Kaunala and  
13 a portion of Waiale'e. While the communities in the various *ahupua'a* may be diverse, they  
14 share a common desire to preserve the natural, cultural and historical heritage of the region.  
15

16 The *ahupua'a* concept is a holistic approach to land management that recognizes the  
17 connections between land-based and marine-based natural resources and the dependent  
18 relationships between ecological functions. Resources were managed for the collective good of  
19 all living within the *ahupua'a*, based on the principle that activities in one part of the *ahupua'a*  
20 affected all other parts (for example, inappropriate management of forestry and agricultural uses  
21 in the upland areas can negatively affect the quality of streams and coastal waters). Adapted to  
22 the context of today's community needs and technology, the *ahupua'a* concept provides useful  
23 principles for guiding the use and management of the North Shore's resources. The application  
24 of these traditional values to current land use activities and environmental regulatory and  
25 management practices promotes effective management of the North Shore's natural resources  
26 and deters land-based activities which contribute to their degradation. In keeping with this  
27 approach, the planning and implementation of land use decisions and land-based actions  
28 considers related effects on coastal waters and the nearshore environment. Moreover, all  
29 development and infrastructure improvement decisions recognize that the changes to one  
30 segment of the community will have consequences that extend beyond that particular action.  
31 Utilizing this approach, a relatively minor project involving a small segment of land or a short  
32 stretch of roadway could have significant implications on other parts of the community when the  
33 various systems that make up the community are considered as a whole. On a broader scale,  
34 there is a need to recognize the connection between the North Shore and its neighboring  
35 regions (i.e., Central O'ahu, Ko'olau Loa and Wai'anae), and the many ways that events and  
36 activities occurring in one region may affect the others.  
37

## 2.2.10 Integrate Principles of Sustainability into Decision-Making Processes

Change is inevitable. It is a fact of life that cannot be ignored. Change in small, rural communities – whether good or bad, big or small – is especially evident and often times controversial. By nature of its population size and scale of development, rural communities tend to be more sensitive to change, and residents of rural areas tend to be more directly affected by the actions of others. While change can be difficult, it is necessary because an inability to adapt to changing conditions can lead to stagnation and failure.

A community that successfully manages change will flourish and prosper in the future. For the North Shore, this means ensuring that planned growth and development respects and adheres to the principles of sustainability.<sup>4</sup>

The North Shore's principles of sustainability have promoted the long-term health of the land and community resources for both current and future generations of residents:

- Protect the environment, natural resources, existing flora and fauna, and where appropriate, open spaces and view planes.
- Use resources so they are not depleted, permanently damaged or destroyed.
- Avoid pollution and exceeding the limits of existing infrastructure systems.
- Respect the cultural, social and physical resources that shape residents' sense of community and rural quality of life.
- Honor the process of change. Make no decisions without first understanding the effects such change will have on the land and community resources.
- Strive for balance between economic prosperity, social and community well-being, and environmental stewardship. Adopt a multidisciplinary approach acknowledging the importance of our community capital in land use and infrastructure planning decisions.

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<sup>4</sup> The most widely quoted definition of sustainable development is from the United Nations Brundtland Commission (1987): "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It recognizes that development can be broken into three equivalent parts (environmental, economic and sociopolitical sustainability) and is based on development that balances economic prosperity with the integrity of natural ecosystems and social equity.

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### 3. LAND USE POLICIES AND GUIDELINES

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The vision for the North Shore described in Chapter 2 will be implemented through the application of the land use policies and guidelines presented in Chapters 3 and 4.

The region's character is typified by pockets of low-rise, small-scale rural centers and residential communities surrounded by large expanses of agricultural lands, open space, and scenic view planes. To ensure that this regional landscape is maintained, proposed land use policies need to reflect an island-wide regional growth policy, resource protection, and community desires to maintain the region's rural setting and unique physical and lifestyle character. These policies focus on the preservation of agricultural lands and open space while directing limited growth toward Hale'iwa and Waialua.

Proposed land use policies are intended to outline future actions and agency decision-making once the Plan is adopted. Policies are broad statements of intent that express the City's overall philosophy toward particular land uses. Guidelines provide more specific guidance to public agencies and private entities in terms of planning, design and implementation of projects and programs in the various land use categories.

It is intended that existing current uses and structures that are legal but are not consistent with the Sustainable Communities Plan policy would be recognized as existing uses and allowed to remain at their locations in their current purpose, character, and level of use. Future proposed land use changes at those locations, however, would have to conform with the policies of the adopted Sustainable Communities Plan.

Chapter 3 is organized under the following headings:

#### SECTION

- 3.1 OPEN SPACE AND NATURAL ENVIRONMENT
- 3.2 AGRICULTURE
- 3.3 PARKS AND RECREATION
- 3.4 HISTORIC AND CULTURAL RESOURCES
- 3.5 RESIDENTIAL COMMUNITIES
- 3.6 COMMERCIAL AREAS
- 3.7 INDUSTRIAL AREAS
- 3.8 VISITOR ACCOMMODATIONS
- 3.9 INSTITUTIONAL USES
- 3.10 MILITARY

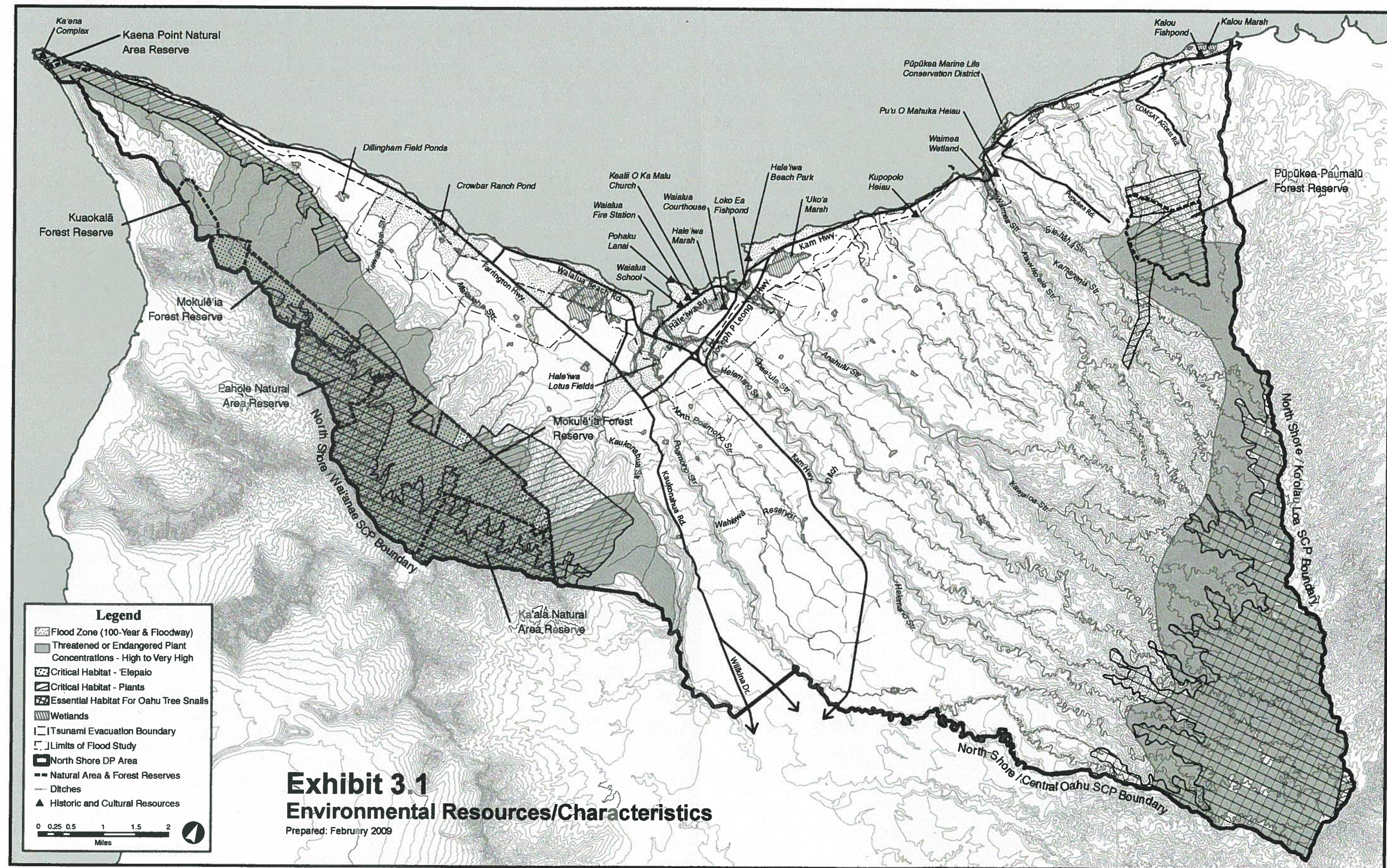
### 3.1 OPEN SPACE AND NATURAL ENVIRONMENT

Open space preservation is a key element of the vision for the North Shore. The natural landscape (the Koʻolau and Waiʻanae Mountain Ranges, coastal *pali*, gulches, and shoreline areas) and man-made elements (agricultural fields and parks) are key open space resources that define the North Shore Sustainable Communities Plan area. Preservation of these resources is essential in maintaining the rural character of the North Shore.

The vast majority of the open space elements in the region are designated as Preservation, Agriculture, and Park on the North Shore Sustainable Communities Plan Land Use Map. Of the estimated 77,000 acres of land within the North Shore Sustainable Communities Plan area, approximately 97 percent is in open space uses, including 53 percent designated as Preservation, 41 percent as Agriculture, and 3 percent as Park (see Open Space Map and Land Use Map in Appendix A). Areas designated as Preservation include lands with significant environmental resources, including watersheds; sites with scenic, historic, cultural, archaeological or ecological significance; and areas with natural ecosystems of endemic plants, fish and wildlife. They may also include lands that may be impacted by natural hazards such as tsunami-prone or flood hazard areas, or steep slopes (see Exhibit 3.1: Environmental Resources/Characteristics).

The City and County of Honolulu Land Use Ordinance (LUO) and accompanying zoning maps (Chapter 21, Revised Ordinances of Honolulu) prescribe the allowable uses of land for the City and County of Honolulu. The LUO identifies the various zoning districts, the uses allowed within each zoning district, and the applicable development standards within each district. Table 3-1 presents the acreage within each zoning district. More than 90 percent of the land within the North Shore region is zoned for either preservation or agricultural use, with approximately 55 percent zoned either AG-1 Restricted Agricultural or AG-2 General Agricultural District and about 41 percent zoned either P-1 Restricted Preservation or P-2 General Preservation District.







**Table 3-1**  
**City and County of Honolulu Zoning Districts, 1998 and 2007**

District	1998 Acreage	2007 Acreage	Acreage Change
R-10 Residential	10.1	10.1	0
R-7.5 Residential	89.0	89.0	0
R-5 Residential	674.5	656.1	-18.4
A-1 Low Density Apt	15.8	15.8	0
A-2 Medium Density Apt	3.7	3.7	0
B-1 Neighborhood Business	30.4	31.1	+0.7
B-2 Community Business	10.4	10.4	0
I-1 Limited Industrial	1.8	1.8	0
I-2 General Industrial	28.9	28.9	0
I-3 Waterfront Industrial	12.0	12.0	0
AG-1 Restricted AG	29,156.9	29,128.1	-28.8
AG-2 General AG	12,560.9	13,590.6	+1029.7
Country District	1,924.3	1,152.6	-771.7
P-1 Restricted Preservation	29,307.1	29,307.1	0
P-2 General Preservation	2,816.8	2,605.5	-211.3
F-1 Military/Federal Preservation	349.6	349.6	0

SOURCE: Department of Planning and Permitting. "1998 Land Use File" and  
 "Zone Changes Approved Between 1998 to 2007." September 2008.

The public acquisition of approximately 1,100 acres at Pūpūkea-Paumalū in 2007 exemplifies the community's commitment to open space preservation. Since the late 1980s when the Obayashi Corporation introduced plans for the proposed Lihi Lani subdivision<sup>5</sup>, the North Shore community has consistently opposed the proposed residential development. As a result of residents' determination to protect the land from future development, the community – with the support of the Trust for Public Land Hawai'i and the cooperation of the landowner – was able to successfully organize the purchase of the property from the Obayashi Corporation. Today, after almost twenty years of community lobbying, the property is held by the State and City and County of Honolulu for open space and natural area preservation and future park use. To

<sup>5</sup> As proposed, the Lihi Lani subdivision involved 1,129 acres of land in Pūpūkea-Paumalū *mauka* of Kamehameha Highway behind Sunset Beach Elementary School. The proposed development called for a golf course, equestrian facility, 300 new homes on one- to three-acre lots, and related infrastructure systems, including a sewage treatment plant.

1 further ensure the long-term preservation of the land for agriculture and open space and prevent  
2 any future development, the property was also rezoned to the AG-2 General Agricultural District.

### 3 4 **3.1.1 Policies**

5  
6 The following are policies for the preservation of open space and the natural environment:

- 7  
8 • Promote integrated resource management principles that support the Native Hawaiian  
9 concept of *ahupua'a*.
- 10  
11 • Protect and enhance significant natural features and ecologically sensitive lands,  
12 including mountain areas, shoreline areas, wetlands, fishponds, natural gulches,  
13 streams and drainageways. Provide protective buffer zones and setbacks around  
14 biologically sensitive areas to minimize habitat disturbance.
- 15  
16 • Ensure State and County land use designations are consistent with the desired long-  
17 term use of the land. Important watershed areas should be classified to the State  
18 Conservation District and zoned P-1 Restricted Preservation District.
- 19  
20 • Protect forested areas and promote expansion of these areas through reforestation to  
21 ensure the long-term preservation of native species, watershed protection and aesthetic  
22 enhancement. Possible candidate sites that may be eligible for future Natural Area  
23 Reserves should be protected, including the Central Ko'olau Mountains, Upper  
24 Makaleha adjacent to Pahole Natural Area Reserve, and areas adjacent to Ka'ena Point.
- 25  
26 • Ensure the long-range protection and continuation of agricultural uses on agricultural  
27 lands.
- 28  
29 • Protect recreational areas that contribute to the North Shore's open space quality,  
30 including the ocean and its resources, the shoreline and mountain areas, park spaces,  
31 and other quasi-public recreational facilities.
- 32  
33 • Protect and preserve views of scenic resources, including the Wai'anae and Ko'olau  
34 Mountain Ranges, coastal *pali*, the coastline, and the Pacific Ocean.
- 35  
36 • Limit visual impacts from utility installations. Ensure that permitted utility installations are  
37 developed and/or managed in ways that maintain or enhance the natural, cultural, and  
38 scenic resource qualities of the surrounding landscape.
- 39



- Maintain open space around existing communities by locating new developments within or next to existing developments within the Community Growth Boundary. Encourage compact development patterns and balance the development of desired or necessary land uses such as affordable housing and public facilities such as schools with the need to preserve open space.
- Promote cooperative interagency and/or public-private partnerships in the long-term protection and management of natural resources.
- Establish adequate shoreline setbacks that consider shoreline changes resulting from erosion hazards and rising sea levels using data such as the annual average erosion rate from the University of Hawai'i shoreline erosion studies.
- Base governmental expenditures for natural resources management and protection, including shoreline maintenance and improvements, on actual site usage (including visitors) rather than on resident population ratios or land values.
- Improve and enhance access to mountain and shoreline recreational areas by obtaining use of Federal and State lands and waters and acquiring available excess lands.
- Establish permanent instream flow standards for perennial streams that weigh the benefits of instream and non-instream uses of water resources, including the economic impact of restrictions of such uses.
- Allow outdoor lighting at the minimum level necessary for public safety, security and community aesthetics consistent with the goals of energy conservation and environmental protection.

### **3.1.2 Guidelines**

This section provides a brief description of the regional open space resources on the North Shore (see Exhibit 3.1 Environmental Resources/Characteristics), followed by guidelines to carry out the policies related to each open space element.

#### **3.1.2.1 MOUNTAIN AREAS**

Mountain areas within the North Shore include segments of both the Ko'olau and Wai'anae Mountain Ranges. Mountain areas are designated as Preservation on the Open Space Map. While most of the mountain areas are in the State Land Use Conservation District, some acreage along the foothills of the Wai'anae Mountain Range is in the State Land Use

Agricultural District and zoned AG-2 General Agricultural District. These lands should be rezoned to P-2 General Preservation District as most of them have slopes of 30 percent or more and some contain endemic plants; but they should remain in the State Land Use Agricultural District, so as to allow for some agricultural uses that are permitted on P-2 lands, such as forestry and livestock grazing, where appropriate, which would help to contain the threats of brushfire on the mountain slopes.

Within the State Land Use Conservation District are several significant environmental resources, including forest reserves and natural area reserves managed by the State Department of Land and Natural Resources (DLNR).

**Table 3-2**  
**State DLNR Forest Reserves and Natural Area Reserves**

Forest Reserves	Natural Area Reserves
Kuaokalā Forest Reserve	Pahole Natural Area Reserve
Mokulē'ia Forest Reserve	Mount Ka'ala Natural Area Reserve
Pūpūkea-Paumalū Forest Reserve	Ka'ena Natural Area Reserve

The Forest Reserve System<sup>6</sup> is comprised of important *mauka* lands containing watershed areas, where rainfall that is intercepted by trees and other vegetation percolates slowly through the soil to recharge aquifers and streams. Forest reserves also serve as wildlife refuges and recreational areas, with most of the forest reserve areas open to the public for certain recreational uses, such as hiking, camping, gathering and seasonal hunting. Some forest reserve areas are considered closed watershed areas, which means that the public is prohibited from entering without a permit. These areas are important resources for protecting watersheds, aesthetic beauty, wildlife habitats, undisturbed ecosystems, and rare native species, while providing forestry use and public recreation.

The Natural Area Reserve System<sup>7</sup> was established by the State to protect and preserve representative examples of the Island's unique native ecosystems and geological formations. They require active management to counteract damage from non-native feral animals (i.e., pigs, goats, deer and cattle, dogs, cats and rats), noxious weeds, and human disturbance. Permanent funding and staffing are needed to continue careful management of these areas.

<sup>6</sup> The Forest Reserve System was created by the Territorial Government of Hawai'i through Act 44 on April 25, 1903. Management of the Forest Reserve System is guided by the Hawai'i State Constitution, Hawai'i Revised Statutes (Chapter 183) and associated Hawai'i Administrative Rules (Chapter 104).

<sup>7</sup> The Natural Area Reserve System was established by the Hawai'i State Legislature in 1970. Management of the Forest Reserve System is guided by the Hawai'i State Constitution, Hawai'i Revised Statutes (Chapter 195) and associated Hawai'i Administrative Rules (Chapter 209).

1 Access to the mountain areas is available via public hiking trails managed and maintained by  
2 the State DLNR Na Ala Hele Program. The Kuaokalā Trail, the Mokulē'ia Trail, and the Kealia  
3 Trail form a network that passes through the Mokulē'ia Forest Reserve and the Pahole Natural  
4 Area Reserve. In Pūpūkea, the Kaunala Trail passes through the Paumalū Forest Reserve. A  
5 number of trails are on private lands and permission is needed for access to these private trails.

6  
7 Mountainous land forms also include coastal *pali* which occur *mauka* of many of the North  
8 Shore's shoreline areas. Their scenic characteristics should be protected and preserved for  
9 general public enjoyment.

10  
11 Guidelines pertaining to mountain areas are as follows:

- 12  
13 • Maintain, protect and restore native forests and ecosystems within the State  
14 Conservation District and lands designated Preservation on the North Shore Sustainable  
15 Communities Plan Land Use Map. Ensure the protection of State conservation lands,  
16 especially those on the Ka'ena coastline and Mokulē'ia foothills.
- 17  
18 • Reclassify important watershed areas which are designated but unused State  
19 Agricultural or Urban Districts to the State Conservation or City Preservation Districts.
- 20  
21 • Identify and protect endangered species habitats, native ecosystems, and other  
22 important ecologically sensitive areas, including the natural area reserves and forest  
23 reserves, from such threats as fire, alien species, feral animals, and human activity.
- 24  
25 • Identify mountain areas within the AG-2 General Agricultural District that are suitable for  
26 rezoning to P-2 General Preservation District.
- 27  
28 • Avoid the establishment of utility corridors and other uses that would disturb areas with  
29 high concentrations of native species.
- 30  
31 • Encourage coordination of natural resource protection and management efforts between  
32 the State DLNR and private landowners, as well as with the U.S. Military, especially  
33 where the Kahuku and Kawaihoa Training Areas overlap with environmentally sensitive  
34 areas.
- 35  
36 • Acquire and maintain public access easements to trailheads and public campgrounds,  
37 including parking and signage at trailheads, where appropriate. Such access should be  
38 required, as appropriate, for any new development.
- 39

- Support State efforts to seek opportunities for cooperative agreements with private landowners to gain access to trails leading to public lands.
- Implement recommendations in the State's Na Ala Hele Program Plan to maintain and enhance *mauka* trail systems.
- Identify historic trails and old government roads of cultural and recreational value to the public.

### 3.1.2.2 SHORELINE AREAS

The North Shore's shoreline extends for over 27 miles between Ka'ena Point and Waiale'e. This world-renowned shoreline, together with its nearshore resources, provides residents and visitors with significant active and passive recreational opportunities, and is a key element in defining the region's rural character and lifestyle. In addition to their recreational and cultural value, shoreline areas are critical to the health of the coastal marine ecosystem and provide significant scenic value.

The North Shore shoreline varies from the rugged rocky coastline at Ka'ena Point to the popular sandy beach at Sunset Beach. Portions of the shoreline, including notable sections of Moku'ele'ia, Kawailoa, and Sunset Point, have experienced beach narrowing or loss as a result of natural shoreline processes and inappropriate development and armoring along the shoreline. The City Department of Parks and Recreation recently completed the City Beach Parks Erosion Study Island of O'ahu, Hawai'i (April 2010) to identify causes and possible measures to address erosion problems at various City parks, including Hale'iwa Beach Park.

An integrated coastal erosion management system to mitigate beach erosion and preserve coastal resources is needed. The State DLNR has developed a Coastal Lands Program (CLP) to manage and protect beaches and coastal areas. The CLP aims to balance preservation of marine and coastal areas with responsible development of appropriate land uses. The CLP is involved with initiating and developing innovative shoreline management techniques that will help the long-term goal of beach and coastal preservation, and oversees the implementation of technical recommendations and policies embodied in the Coastal Erosion Management Plan (COEMAP). In an effort to develop a comprehensive strategy to manage the conservation and restoration of Hawai'i's beaches, the State DLNR is preparing the Hawai'i Beach Management Plan (HBMP). Once completed, the HBMP will provide a single, comprehensive document with implementation tools that all management agencies will reference for any land use applications pertaining to a specific coastal region.

Guidelines for shoreline areas are listed. Additional guidelines for recreational uses in shoreline areas can be found in Section 3.3.2.3.

- Preserve rare and sensitive coastal resources including coastal strand vegetation, sand dunes, and anchialine pools. Establish buffer zones around these areas where necessary.
- Prohibit off-road vehicle, motorcycle and bicycle use in ecologically sensitive areas, including coastal dunes and shoreline beaches. Identify and maintain recreational areas specifically designated for such use.
- Protect nearshore coral reefs and other marine life from damaging activities such as soil erosion, nonpoint source pollution, dredging of coral reefs, and alterations to nearshore water circulation.
- Establish access where justified by public demand, traditional use patterns, high quality recreational resources, or to circumvent barriers that exist along the shoreline.
- Improve and expand public access to the shoreline at approximately ½-mile intervals with vehicular and bicycle parking and lateral access along the shoreline.
- Implement the recommendations of the State of Hawai'i's Coastal Nonpoint Pollution Control Program and utilize best management practices in agricultural land use and operations to avoid or minimize chemical runoff and other "nonpoint" contaminants in shoreline areas.
- Support research to determine causes of coastal erosion and identify appropriate management strategies to avoid future erosion hazards.
- Encourage interagency coordination and public/private cooperation in developing and implementing beach management plans, with an emphasis on nonstructural approaches.
- Discourage development or activities which result in beach loss, and encourage development practices or activities such as increased shoreline setbacks which result in beach preservation or enhancement.
- Require buildings along the shoreline to adhere to the City's and Federal Emergency Management Agency (FEMA) minimum building elevations and structural guidelines. In addition, adopt development standards that require new structures to incorporate

building styles compatible with coastal hazards such as coastal erosion, tsunami and hurricane overwash.

- Discourage visual obstructions such as walls and fences along the coastal highway to maintain and enhance existing panoramic views. Clear shrubs and vegetation on vacant State- and County-owned properties that would maintain views of the ocean from public roadways along the shoreline.
- Implement active protection and management practices that preserve and enhance native and other resident fish and aquatic species populations and habitats, including nearshore coral reefs. Efforts to enhance opportunities for commercial and recreational fishing should use management practices and techniques that sustain fish populations and habitat quality so as to maintain a quality aquatic environment for public enjoyment.
- Place sand from channel, stream, and harbor mouth dredging projects on local beaches in accordance with Hawai'i Revised Statutes Chapter 205A.

### 3.1.2.3 WETLANDS

Wetlands are generally described as areas which are covered or saturated with water, whose substrate is primarily characterized by undrained moist or saturated soils and which support water-loving plants. Wetlands are important environmental resources that can provide irreplaceable benefits including flood protection, water quality improvements, habitat for fish and wildlife, and opportunities for recreation, education, and research. The U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency as well as State and County agencies have responsibilities for the protection and management of wetlands. Table 3-3 lists the major wetland areas on the North Shore.

**Table 3-3  
Major Wetland Areas**

Hale'iwa Marsh
'Uko'a Marsh
Loko Ea Fishpond
Kalou Marsh
Crowbar Ranch Pond
Dillingham Field Ponds
Waimea Wetland and Estuary
Hale'iwa Lotus Fields
Waialua Beach Road Lotus Fields

Guidelines pertaining to wetland areas are as follows:

- Preserve and maintain all North Shore wetlands and wildlife habitats. When considering future activities/construction in the vicinity of biologically sensitive areas such as wetlands, the preferred sequence will be to:
  - avoid ecologically sensitive areas entirely;
  - if not possible, minimize potential project impacts; and
  - if negative impacts are unavoidable, require mitigation that will offset the loss of resources.
- Support the restoration and protection of 'Uko'a Marsh. Protection can be achieved through fee acquisition, land banking, cooperative agreements with public agencies and private landowners, conservation easements, or other strategies.
- Support efforts to restore Loko Ea Fishpond as an interactive, productive and functioning aquaculture resource. Promote the development of a cultural learning center providing both visitors and residents opportunities to experience the unique environment around Loko Ea Pond and 'Uko'a Marsh. Possible activities may include tours of a working aquaculture farm, as well as cultural and environmental education programs that teach traditional and modern aquaculture techniques and the history of the Pond and its adjacent areas. Walkways extending north to 'Uko'a Pond could provide opportunities for interpretive nature walks.

#### **3.1.2.4 NATURAL GULCHES, STREAMS, AND DRAINAGEWAYS**

The ridges and valleys of the Ko'olau and Wai'anae Mountain Ranges form streams and natural drainageways which are integral elements of the open space on the North Shore. Several intermittent and perennial streams provide essential habitat for Hawai'i's flora and fauna, and function as scenic, recreational and cultural resources. To protect stream resources, major streams and stream corridors are designated as Preservation on the North Shore Sustainable Communities Plan Land Use Map.

Streams are also the primary means for carrying water from the inland areas to the ocean and are normally capable of handling runoff from normal rainfall amounts. During periods of intense rainfall, however, a number of these drainageways overflow (see Section 4.6).

Sedimentation as well as chemical and biological contaminants affect stream water (surface water) quality. Chemical and biological contaminants, as well as untreated sewage from leaking cesspools, also affect groundwater quality. The polluted surface and groundwater eventually reach the ocean and affect nearshore water quality.

Table 3-4 lists the major gulches and streams on the North Shore that are identified on the North Shore Sustainable Communities Plan Land Use Map.

**Table 3-4**  
**Major Gulches and Streams**

Hāli'i Gulch	Anahulu River/Kawailoa Gulch
Makaleha Stream/Gulch	Waimea River
Kaukonahua Stream/Gulch	Kaiwiko'ele Stream/Gulch
Ki'iki'i Stream	Kamananui Stream/Gulch
Poamoho Stream/Gulch	'Elehāhā Stream/ Kauwalu Gulch
North Poamoho Stream/Gulch	Kalahopele Gulch
Paukauila Stream	Kalunawaika'ala Stream/Gulch
Helemano Stream/Gulch	Pakulena Stream/Gulch
Ōpae'ula Stream/Gulch	Kaunala Gulch
Kawailoa Gulch	Paumalū Stream/Gulch

Guidelines pertaining to natural gulches and drainageways are as follows:

- Preserve the aesthetic and biological values of the natural gulches, streams, and drainageways as part of the North Shore's open space system. Where feasible, establish wildlife habitat protective buffer zones and/or setbacks along rivers, streams, and shoreline areas. Where possible, provide public access to these open space and recreational resources.
- Minimize soil erosion, runoff of pesticides, fertilizers and other nonpoint source contaminants into streams, wetlands, and marine habitats. In addition to stream setbacks, utilize erosion control devices, integrated pest management plans, and revegetation of disturbed areas. Incorporate erosion control measures and best management practices, as recommended in the State Coastal Nonpoint Pollution Control Program, to prevent pollution of wetlands, streams, estuaries, and nearshore waters.
- Limit uses in these areas to conservation uses, compatible recreational uses such as hiking, traditional hunting, fishing, gathering, religious and cultural practices, and controlled diversion for agricultural purposes. Avoid development in ecologically



sensitive areas; if activities are allowed, minimize impacts and implement mitigative measures that will fully offset any loss of resources.

- Preserve and maintain the natural streams and drainageways within the developed areas by designating them as part of the open space system. To the extent possible, limit any modifications to natural gulches and drainageways, unless they are necessary for flood protection, to preserve water quality and protect aesthetic and biological resources.
- If modifications are necessary, mitigate impacts on biological habitats by using stream-side vegetation, rip-rap boulder lining of stream banks, v-shaped bottom channels to maintain a stream flow during low rainfall periods, and other designs to promote aeration.
- Integrate planned improvements to the North Shore drainage system into the regional open space network by emphasizing the use of retention basins and recreational access in the design approach.

### **3.1.2.5 AGRICULTURAL AREAS**

Preservation of agricultural areas is essential to promoting agriculture and maintaining the scenic open space features and rural character of the region. In addition to the Community Growth Boundary, policies and guidelines are established to protect agricultural lands from development. Policies and guidelines pertaining to agricultural areas are listed in Section 3.2 relating to Agriculture.

### **3.1.2.6 PARKS**

Parks provide important open space areas to meet the recreational needs of the North Shore residents and island-wide visitors. While beach parks serve island-wide needs, parks within the community meet the recreational needs of North Shore residents. In addition to meeting recreational needs of the residents and visitors, parks play a major role in preserving the open space setting on the North Shore. Policies and guidelines on parks are included in Section 3.3 relating to Parks and Recreation.

### **3.1.2.7 SCENIC RESOURCES AND SCENIC VIEWS**

With its vast open spaces, scenic shorelines, and the backdrops of the Waiʻanae and Koʻolau Mountain Ranges and the coastal *pali*, the North Shore is blessed with an abundance of scenic resources.

1  
2 Panoramic views throughout the region are identified on the Open Space Map. The significant  
3 scenic views that should be protected and enhanced include the following:  
4

- 5 • Views of the Wai'anae and Ko'olau Mountains, the Pacific Ocean and shoreline, Waialua  
6 and Hale'iwa Towns from Kamehameha Highway and Kaukonahua Road as one enters  
7 into the North Shore.
- 8
- 9 • *Mauka* views of the Wai'anae Mountains from Farrington Highway, Kaukonahua Road,  
10 Kamehameha Highway, and Weed Junction.
- 11
- 12 • Stationary views from the shoreline between Ka'ena Point and Makaleha Beach.
- 13
- 14 • Views of the Wai'anae Mountain Range and agricultural fields from Crozier Drive.
- 15
- 16 • *Makai* views of Ki'iki'i Stream to Kaiaka Bay from Farrington Highway near Thompson  
17 Corner.
- 18
- 19 • *Makai* view of open space to Pu'uiki Beach Park from Pu'uiki Street and cane haul road  
20 crossing.
- 21
- 22 • *Makai* views along Hale'iwa Road into Hale'iwa Ali'i Park, Hale'iwa Boat Harbor and  
23 Hale'iwa Beach Park.
- 24
- 25 • Stationary *mauka* and *makai* views from Kaiaka Bay Beach Park, Hale'iwa Ali'i Beach  
26 Park and Hale'iwa Beach Park.
- 27
- 28 • Views of Kaiaka Bay from Hale'iwa Road at Paukauila Stream.
- 29
- 30 • *Mauka* views along Kamehameha Highway of Anahulu Stream and Loko Ea Pond.
- 31
- 32 • Intermittent *makai* views from Kamehameha Highway between Kawaihoa and Sunset  
33 Beach.
- 34
- 35 • Stationary views from beach parks and access areas from Kawaihoa to Waiale'e Beach  
36 Park.
- 37
- 38 • *Mauka* views of the Ko'olau Mountains and *pali* along Kamehameha Highway from  
39 Hale'iwa to Waiale'e.
- 40

- Views from the road pullover above Waimea Bay, from the shoreline at Waimea Bay and from the coral formation at Pūpūkea Beach Park.
- *Mauka* and *makai* views of Waimea Valley and Bay from the Kamehameha Highway bridge over the Waimea River.
- Lateral views from Pua'ena Point.
- Lateral views from Pūpūkea Beach Park.
- Panoramic view from the area near the hairpin turn on Kawaihoa Drive.
- Panoramic view of the coast from Pūpūkea Heights.
- View from Pu'u o Mahuka Heiau State Monument.
- *Mauka* views from nearshore waters.

Guidelines pertaining to scenic resources and scenic views are as follows:

- Conduct planning with attention to preservation of natural open space, protecting coastal and *mauka* views from public roadways, and conserving important viewsheds.
- When view reductions may come from agricultural activities which intrude into viewplanes or otherwise degrade or diminish scenic qualities, the protection of roadway views should be balanced with the operating requirements of agriculture.
- Evaluate the impact of land use proposals on the visual quality of the landscape, including viewplane and open space considerations.
- Site new antennas, telecommunication equipment and alternative energy systems in appropriate locations to minimize their impact on visual resources. Encourage site clustering and techniques that blend the equipment into the natural landscape.
- Discourage the use and installation of overhead utility lines and poles. Strong consideration should be given to placing replacement and new transmission lines underground. Undergrounding utility lines will enhance viewplanes and increase highway safety. Whenever possible, relocate or place underground overhead utilities that significantly obstruct public views. If unavoidable, locate any future overhead utilities on the *mauka* side of the public coastal highway.

- Minimize the adverse effects of artificial lighting on wildlife and human health by balancing the need of outdoor lighting for night utility, security, and desire for reasonable architectural expression with the need to conserve energy and protect the natural environment.
- Adopt outdoor night lighting standards that encourage efforts to minimize glare and stray light, and reinforce the differences between urban and rural communities.

### **3.1.2.8 UTILITY CORRIDORS AND GREENWAYS**

Utility corridors and greenways are required to provide for a distribution system throughout the region. Where located in settlement areas, these corridors may provide for greenways that can serve as pedestrian or bicycle routes, if issues of safety, liability, and maintenance can be adequately addressed.

Guidelines pertaining to utility corridors and greenways are as follows:

- Provide sufficient easement width for the major trunk lines and transmission lines for utility systems, when their alignment is not within a road right-of-way, to permit the growth of trees within the easement.
- When overhead transmission lines are located within or adjacent to a road right-of-way, there should be sufficient width to permit the growth of trees adjacent to the transmission line, consistent with the applicable operations, maintenance, and safety requirements. The purpose of the landscaping is to divert attention from the overhead lines and, preferably, obscure views of the overhead line from the travelway and adjacent residential areas.
- Permit the use of utility easements for pedestrian and bicycle routes. Encourage coordination between utility companies, landowners, pertinent agencies, and the community to ensure that safety, liability, and maintenance issues are adequately addressed.
- Encourage the use of indigenous vegetation that is slow growing and thus minimizes the need to use herbicides for vegetation control.
- Promote technologies that support alternative energy sources, including solar, wind, and wave power. Allow community and agency review of individual proposals to ensure compatibility and suitability.

### 3.1.3 Relation to Open Space Map and Land Use Map

The following areas shown on the Open Space Map and Land Use Map in Appendix A are components of the regional open space system:

**Mountain and Agricultural Areas.** Mountain areas, including areas within the State Conservation District, are designated as Preservation and are located outside of the Community Growth Boundary. Agricultural lands outside and within the Community Growth Boundary are shown.

**Natural Gulches and Drainageways.** Gulches and streams outside and within the Community Growth Boundary are indicated for preservation to maintain proper drainage functions.

**Shoreline Areas and Parks.** Shoreline parks and district parks are shown. Neighborhood parks within the residential areas are not shown.

**Panoramic views.** Continuous and intermittent panoramic views are identified on the Open Space Map. Other significant scenic views identified in Section 3.1.2.7 are not shown.

## 3.2 AGRICULTURE

Agricultural lands are a key component of the North Shore's rural character. Cultivated fields extending towards the mountains significantly contribute to the form and character of the North Shore's rural landscape and the visual qualities that the region is known for. The protection of agricultural lands and agricultural uses, together with the assurance of a thriving agriculture industry, is essential to retaining the rural character and scenic open space features that are so valued by North Shore residents and visitors.

Nearly 45,000 acres, or about 60 percent, of the 77,000 total acres of land within the North Shore Sustainable Communities Plan region are located within the State Agricultural District. This includes the plateaus that extend north from Helemano Plantation towards Mokulē'ia and Sunset Beach, to the areas bordering Hale'iwa and Waialua Towns. Of the 45,000 acres, around 20,000 acres are considered high-quality agricultural lands suitable for commercial cultivation of crops, with the balance providing agricultural land for smaller-scale, less-intensive forms of agriculture. In general, productive agricultural lands include lands designated "Prime," "Unique," or "Other" by the State ALISH (Agricultural Lands of Importance to the State of Hawai'i) system, rated "A" or "B" by the Land Study Bureau (LSB), and which have irrigation sources or other enabling infrastructure. On the North Shore, the most productive agricultural lands are located near or below the Wahiawā Reservoir Ditch. Most of these lands are

1 favorable for cultivation because they are well-drained and generally free of stones; nearly level  
2 or gently sloping with good machine tillability; have deep soils and adequate sunlight; served by  
3 an extensive agriculture infrastructure network already in place (roads, irrigation and power to  
4 drive water pumps); and are located within reasonable trucking distance to serve local markets  
5 and for overseas shipping. Less productive lands include lands with steep slopes, lands at  
6 higher elevations where moisture/irrigation cannot be controlled, and lands with lower-rated  
7 soils. These include some of the Mokulē'ia, Kemo'o and Waimea fields and fields in the foothills  
8 of the Ko'olau Mountain Range.

9  
10 Following the decline of the corporate sugar and pineapple industries during the 1990s, large  
11 acreages of agricultural lands that were historically controlled by the plantations became  
12 available for other uses, creating new opportunities for smaller-scale, entrepreneurial diversified  
13 agriculture ventures. In contrast to the plantation days, the agriculture industry on the North  
14 Shore is currently comprised mainly of small farms, with a few larger, corporate farms (e.g.,  
15 Pioneer Hi-Bred International). While large portions of the agricultural land remain in the  
16 ownership of Dole Food Company and Kamehameha Schools, most of it is now leased to a  
17 number of farmers growing a variety of products.

18  
19 Some of the crops that are being successfully grown on the North Shore include coffee, papaya,  
20 banana, lychee, mangoes, truck crops, taro, tropical flowers, cattle feed, and seed corn. Small-  
21 scale commercial forestry and ranching, including free range cattle, has been initiated at the  
22 upper elevations where intensive cultivation of crops is not feasible. Aquaculture, which  
23 contributes to the diversification of the agricultural base and provides additional opportunities for  
24 economic development, occurs at specific sites in Mokulē'ia, Hale'iwa and Kawailoa. Continued  
25 cleanup of the former Dillingham Quarry site in Mokulē'ia and further expansion of existing  
26 aquaculture operations in the area would support the future growth of the aquaculture industry.  
27 As diversified agriculture continues to develop and adapt to changing market conditions, other  
28 suitable agricultural crops and uses may be introduced in the future.

29  
30 The successful development of a viable agriculture industry on the North Shore provides  
31 residents with jobs and economic development opportunities that foster a connection with the  
32 land. It can also increase the production of locally grown foods and products, which may  
33 encourage greater consumption of local agricultural products, contributing to increased self-  
34 sufficiency and a reduction in O'ahu's dependency on imported foods. More importantly, it  
35 ensures that land designated for agriculture remains in active agricultural production and is not  
36 developed for higher value uses (such as housing and commercial development). Like other  
37 rural communities, the North Shore has experienced a steady increase in land values due to a  
38 growing demand by individuals seeking a rural lifestyle. With rising land values affecting  
39 agriculture's profitability, many landowners have been seeking alternative development  
40 schemes that involve higher-intensity uses and greater economic returns, making agricultural  
41 lands increasingly vulnerable to nonagricultural development. To minimize the market

1 pressures to subdivide agricultural lands into large-lot, rural-style estates where agriculture is no  
2 longer the primary land use, agricultural lands need to be protected and dedicated for  
3 agricultural use and the economic barriers that impede the industry's growth need to be  
4 addressed. Appropriate incentives for maintaining the long-term availability of important  
5 agricultural lands and industry development should be explored, designed, and implemented as  
6 high priority action items by pertinent agencies and parties.

7  
8 Lake Wilson (located within the Central O'ahu Sustainable Communities Plan area) serves as  
9 the reservoir for the Wahiawā Irrigation System and is the primary and irreplaceable source of  
10 irrigation water for the majority of the productive agricultural lands in the North Shore area. The  
11 provision of high-quality irrigation water from Lake Wilson greatly enhances agricultural  
12 productivity and crop diversity.

13  
14 **Agricultural Support Facilities.** In addition to the cultivation of products, agricultural land uses  
15 also include the related industrial and commercial activities that support crop production and  
16 sales. Agricultural support activities are an essential part of the industry, and include crop  
17 storage, processing, packing, and manufacturing of products, distribution facilities, and  
18 agriculturally related administrative, management, marketing, and sales facilities. These  
19 support activities are directly dependent on crop production and need to be located on  
20 Agriculture-designated lands in close proximity to the activity it serves.

21  
22 While certain agricultural support facilities may require large structures and base-yard  
23 operations, the overall nature of agricultural support activities differs from typical forms of  
24 industrial and commercial uses and relates harmoniously with adjacent agricultural uses. The  
25 consolidation of agricultural support facilities in designated areas will promote the cost-efficient  
26 use of existing infrastructure and prevent the urbanization of productive agricultural lands.  
27 Potential facilities to be located within the designated support areas may include a regional  
28 agricultural wholesale and distribution center with processing and packing plants and  
29 warehouse spaces, a vacuum cooling plant and refrigerated storage, a fruit fly disinfestation  
30 facility, and maintenance facilities for farm equipment.

31  
32 **Agriculture-Based Tourism.** Agriculture-based tourism is an alternative revenue-generating  
33 activity that combines education about agricultural products with recreation and the experience  
34 of interacting with the land and the grower. It involves visiting a working farm or agricultural  
35 venture to enjoy, learn about or participate in the operation, and may include activities such as  
36 farm tours with retail sales of locally grown produce, hunting, fishing, horseback riding and/or  
37 bicycling tours, farmers' markets, restaurants featuring regional cuisine, and agricultural fairs  
38 and festivals. By providing an additional revenue source, such visitor-related activities can  
39 supplement farm incomes and contribute to the economic viability and stability of the farm.  
40 Overnight visitor accommodations on agricultural lands are not appropriate.

### 3.2.1 Policies

The following policies are applicable to agricultural lands:

- Protect all productive, high-value agricultural lands, regardless of current crop production capabilities, from uses that would undermine or otherwise irreversibly compromise their agricultural potential and crop production capabilities.
- Promote the long-term viability of diversified agriculture on the North Shore and ensure the continued productive use of the land.
- Maintain a healthy and competitive industry that supports a range of different types and scales of agriculture.
- Ensure that agriculture is the primary use of agricultural lands. Prohibit the improper use of agricultural lands, including the development or subdivision of agriculturally designated and zoned lands for residential and other nonagricultural uses, unless accessory to agricultural use. Do not allow token farming (i.e., “fake farms”) or ranching as a ruse to exploit agricultural land.
- Maintain the current agricultural land use and zoning designation of agricultural lands within the Community Growth Boundary that are in the State Agricultural District and zoned for agriculture, except for limited “infill” areas contiguous to Hale‘iwa and Waialua Towns that are designated for future residential.
- Minimize soil erosion, pesticide and fertilizer runoff, and other nonpoint source contaminants that flow from agricultural lands to protect streams, wetlands and marine habitats.
- Maintain and upgrade the existing agricultural infrastructure (irrigation system and roads).
- Encourage the development of regional agricultural support facilities at Waialua and Kailua through the use of economic and tax incentives.
- Develop and enforce a stringent set of criteria that define the minimum requirements for the meaningful and credible use of agricultural land.
- Encourage landowners to provide affordable long-term leases to farmers. Incentives for landowners may include subdivisions with reduced infrastructure requirements,



expeditious processing, or other provisions that would reduce the cost of agricultural subdivision and enable tenants to obtain financing.

- Promote the development and provision of quality water resources that support bona fide agricultural operations and activities by providing economic incentives for farmers and landowners.
- Consider alternatives to the current tax rate structure to afford tax relief for farmers.
- Plan for the future of O'ahu's agricultural industry and develop an island-wide comprehensive agricultural development plan.

### **3.2.2 Guidelines**

The following guidelines carry out the policies for agriculture.

#### **3.2.2.1 AGRICULTURAL LANDS**

- Enforce permitted uses on agricultural lands to ensure that the use is contributing to meaningful and credible agricultural production on the same or nearby properties.
- Cluster and locate dwellings near similar uses to preserve open space, maximize the use of productive agricultural lands, and reduce infrastructure costs, when planned as part of an agricultural activity.
- Design and site buildings and other facilities that are accessory to an agricultural operation to minimize the visual impact on nearby areas and views from arterial and major collector roads.
- Adopt development standards and permitting procedures that simplify and streamline the permitting requirements for uses that support the growth of agriculture, including agricultural support facilities and agriculture-based tourism.
- Maintain adequate physical buffers between agricultural land uses and surrounding land uses.
- Base any subdivision of agricultural lands on the most appropriately sized, viable economic unit for agricultural production.

- 1 • Identify and implement – as an immediate high priority action item at the State and  
2 County levels – appropriate economic incentives designed to promote and facilitate the  
3 growth of diversified agriculture.  
4
- 5 • Support agricultural research and development activities targeted towards increasing  
6 operational efficiencies, economic returns, and the effective utilization of agricultural  
7 lands and supporting infrastructure, which enables sustainable usage of agricultural  
8 resources.  
9
- 10 • Assist residents to develop skills in agriculture and related specialized industries so that  
11 residents can seek local employment in the area.  
12
- 13 • Support a mentor program for area teens to learn about agricultural practices,  
14 economics, and business so that interest and commitment to agriculture may continue  
15 on to future generations.  
16
- 17 • Support the expansion and diversification of aquaculture in the region, including the  
18 continued cleanup of the former Dillingham Quarry site in Mokulē'ia and expansion of  
19 existing aquaculture operations in the area.  
20
- 21 • Identify potential sites for aquaculture or mariculture parks.  
22
- 23 • Encourage agricultural producers to develop Conservation Plans, in conjunction with the  
24 West O'ahu Soil and Water Conservation District, to manage and protect natural  
25 resources.  
26
- 27 • Assist governmental agencies and landowners to upgrade and maintain existing  
28 infrastructure networks, including roads and irrigation systems.  
29
- 30 • Improve the quality of irrigation water from Lake Wilson.  
31
- 32 • Work with the State to identify and protect Important Agricultural Lands as defined by Act  
33 183 (Session Laws Hawai'i, 2005).  
34

### 35 **3.2.2.2 AGRICULTURAL SUPPORT FACILITIES**

- 36
- 37 • Develop agricultural support facilities in Waialua and Kawaihoa.  
38
- 39 • Ensure that permitted agricultural support facilities do not adversely affect agricultural  
40 production in the area or present health hazards or nuisances to adjacent areas.

- Require all agricultural support facilities in the region to maintain a direct relationship to local agricultural production.
- Site and design facilities to minimize development impacts and maximize the amount of farmland preserved.

### 3.2.2.3 AGRICULTURE-BASED TOURISM

- Allow agricultural, recreational and educational programs, and limited outdoor recreational or other uses if the activity is complementary to the primary agricultural use of the land and it does not interfere with the agricultural use of the site.
- Monitor tourism-related activities conducted on agricultural lands to ensure that such activities do not adversely impact on-site or adjacent agricultural activities or other resources.
- Provide technical and business development support for visitor-related proposals.
- Identify and develop a convenient, suitable location in or near Hale'iwa and/or Waialua Town to establish a farmers' market where farmers can market products locally.
- Identify and develop a permanent site in the Sunset Beach vicinity to promote the North Shore Country Market.
- Develop an agricultural museum that includes a demonstration area showing various crops in different stages of growth and processing.

### 3.2.3 Relation to Open Space Map and Public Facilities Map

Agricultural lands are located both within and outside the Community Growth Boundary, as indicated on both maps.

The Public Facilities Map identifies two future areas for agricultural support facilities. The site *makai* of the Waialua Mill up to the former cane haul road and Goodale Avenue/Waialua Beach Road is intended to accommodate 20 to 25 acres of agricultural support uses, and is designated as the primary agricultural support area for the region. A secondary area of 10 to 15 acres in Kawaihoa near the Alluvion Nursery (i.e., the area *mauka* of Kamehameha Highway across from Papailoa Road and Laniākea Beach Park) is intended to accommodate similar support facilities for products cultivated in Kawaihoa.

### 3.3 PARKS AND RECREATION

The North Shore area has an abundance of recreational resources and is known by surfers around the world as a surfing capital. The City Department of Parks and Recreation (DPR) and the State DLNR, State Parks Division, maintain control of a number of parks and recreational facilities on the North Shore. In addition, several private and quasi-public organizations provide recreational opportunities in the region. Recreational resources within the North Shore Sustainable Communities Plan area are shown in Exhibit 3.2.

**City and County Parks.** The DPR's Standards and Design Precepts for Future Park Development (December 2004) is the long-range plan for park facilities on the island of O'ahu. Parks are classified according to two basic categories: "island-based parks" and "community-based parks." Island-based parks serve the needs of the island-wide population. The DPR standard for island-wide parks is twenty-five acres per 1,000 de facto population. They include regional parks, beach/shoreline parks, beach/shoreline right-of-ways, botanical gardens, golf courses, and zoological parks. The size of the park and the facilities to be provided are based on the character of the site, intended use, and availability.

Existing DPR beach/shoreline parks on the North Shore are shown in Table 3-5. Kawailoa Beach Support Park, Leftovers Beach Park, and Uppers Beach Park, have been added to the City Park system for development for future park use. In addition, the City maintains a number of right-of-ways which provide access to the shoreline.

**Table 3-5**  
**City and County of Honolulu Beach Parks**

<b>Park</b>	<b>Acreage</b>
Mokulē'ia Beach Park	38.5
Makaleha Beach Park	27.7
‘Āweoweo Beach Park	1.4
Kaiaka Bay Beach Park	52.8
Hale‘iwa Ali‘i Beach Park	19.3
Hale‘iwa Beach Park	15.7
Laniākea Beach Support Park	3.0
Chun's Reef Beach Support Park	3.0
Kawailoa Beach Park	0.4
Waimea Bay Beach Park	22.2
Kahawai Beach Community Park	1.5
Pūpūkea Beach Park	36.6
Banzai Rock Beach Support Park	2.3
‘Ehukai Beach Park	1.2
Sunset Beach Park	17.7
Sunset Beach Support Park	2.1
Sunset Point Beach Park	0.9
Waiale‘e Beach Park	25.7

1 Community-based parks are intended to provide for active recreation and consist of  
2 neighborhood, community and district parks. The DPR standard for community-based parks is  
3 two acres per 1,000 resident population, although this may vary according to each region's  
4 situation. Community-based parks provide courts and playing fields for various sports and  
5 serve a wide array of active sports leagues. Existing community-based parks on the North  
6 Shore are Kamananui Neighborhood Park, Sunset Beach Neighborhood Park, and Waialua  
7 District Park. To expand active recreational opportunities in the region, two island-based beach  
8 parks (Hale'iwa and Pūpūkea Beach Parks) are equipped with ball fields.

9  
10 There is currently a shortage of community-based parks in the North Shore Sustainable  
11 Communities Plan area. Based on projected population for the year 2035, DPR anticipates that  
12 there will be a need for an additional community park (average 10 acres) and two additional  
13 neighborhood parks (average 4 to 6 acres) for the North Shore. Hale'iwa Beach Park Mauka  
14 and Pu'uiki Park are identified as potential community-based parks to address the shortage of  
15 these parks on the North Shore, although Hale'iwa Beach Park Mauka is less than 4 acres, and  
16 a portion of the property is designated as a wetland. Therefore, development potential is limited.

17  
18 Following the downzoning of the Pūpūkea-Paumalū lands (the former Lihi Lani property), the  
19 City acquired about 25 acres of land adjoining Kamehameha Highway for future park  
20 development. The community supports the long-term expansion of the Sunset Beach  
21 Neighborhood Park in this area. There are no regional parks on the North Shore.

22  
23 There are no existing or planned public golf courses on the North Shore.  
24







1   **State Parks.** The State DLNR manages three parks in the region: Ka'ena Point State Park,  
2   Pu'u o Mahuka Heiau State Monument, and the Pūpūkea-Paumalū State Park Reserve. The  
3   Ka'ena Point State Park extends from Dillingham Airfield around Ka'ena Point to Mākua Valley  
4   on the west side of the Wai'anae Range. It is located at the end of Farrington Highway on 779  
5   acres of land, offering opportunities for picnicking, hiking and shore fishing along a relatively  
6   remote wilderness coastline. Pu'u o Mahuka Heiau State Monument is situated on 5.7 acres  
7   overlooking Waimea Bay Beach Park off Pūpūkea Road. A low-walled, platform-type temple  
8   with two adjoining structures, Pu'u o Mahuka is O'ahu's largest *heiau*. It is the reputed sacrifice  
9   site of Captain George Vancouver's watering party of 1793. The Pūpūkea-Paumalū State Park  
10   Reserve consists of 1,119 acres of *mauka* land at Sunset Beach, surrounded by the residential  
11   communities *mauka* of Kamehameha Highway and along Pūpūkea Heights, Sunset Beach  
12   Elementary School, and the Pūpūkea Boy Scout Camp, U.S. Army Kahuku Training Area, and  
13   the Girl Scout Camp Paumalū. The property was transferred to the State DLNR in 2007  
14   following efforts by the North Shore Community Land Trust, the Trust for Public Land, and other  
15   supporters to raise funds and purchase the former Lihi Lani property. Preparation of the  
16   *Pūpūkea-Paumalū Long-Range Resources Management Plan* (Public Review Draft, October  
17   2009) is ongoing, with a level of community support for resource protection and preservation,  
18   native plant restoration, and recreational opportunities such as nature study, hiking, biking and  
19   scenic viewing.

20  
21   **Other State Recreational Facilities.** The Hale'iwa Boat Harbor is the only recreational boat  
22   harbor facility in the North Shore region. The facility is owned by the State and managed by the  
23   DLNR, Division of Boating and Ocean Recreation. The harbor is located in Waialua Bay at the  
24   north end of Hale'iwa Town near the mouth of the Anahulu River. It encompasses  
25   approximately 7.4 acres of protected water, with a 600-foot-long, 120-foot-wide, 12-foot-deep  
26   entrance channel that provides access to two inner basins. A two-lane boat launching ramp is  
27   located on the west side of the harbor. A single lane launch ramp, loading dock and fish hoist  
28   are located on the southeast side of the harbor. A harbor master's office is also on the  
29   premises. The harbor contains 107 in-water berthing spaces, 45 dry storage berths, and 13  
30   temporary mooring spaces. There is a demand for these spaces, with approximately 80  
31   individuals on the waiting list for in-water berthing and more than 50 individuals on the dryland  
32   storage waiting list.

33  
34   As the only boat launching facility on the North Shore, the harbor plays an important role in  
35   meeting the demand for protected berthings and moorings to facilitate recreational and  
36   commercial fishing pursuits. It also provides facilities for trailered vessels and other marine-  
37   related recreational activities such as equipment rentals and land-based fishing. There are no  
38   plans to expand the harbor breakwater or increase the harbor footprint. Any additional slips, if  
39   accommodated, would be constructed within the harbor's existing footprint. However, additional  
40   land in close proximity to the harbor is needed to expand existing dryland storage facilities.



1 The U.S. Army Corps of Engineers has a project pending to dredge the Hale'iwa Boat Harbor. If  
2 sand dredged from the harbor is suitable, it may be used to nourish nearby eroding beaches,  
3 such as at Hale'iwa Beach Park.

4  
5 Securing the harbor and its facilities is also a major concern. Vandalism, trespassing, loitering,  
6 camping and illegal drinking/drugs around the harbor and park area are issues of concern for  
7 the community. Additional resources to increase the ability to secure the harbor, together with  
8 State and City enforcement, should bring a stop to the unwanted, illegal activities.

9  
10 **Institutional and Private Facilities.** The YMCA Camp Erdman, Camp Mokuē'ia, and Camp  
11 Homelani are private facilities which provide educational and recreational activities. Other  
12 quasi-public recreation facilities include the A. Wallace Scout Reserve, Camp Kawaihoa Uka,  
13 Camp Paumālū, and Camp Pūpūkea that are used primarily as Scout Camps. The Mokuē'ia  
14 Polo Field and Dillingham Ranch Pony Club are also located in the North Shore area.

15  
16 Waimea Valley is a 1,800-acre cultural and ecological park under the recent ownership of the  
17 State of Hawai'i Office of Hawaiian Affairs. Occupying the entire *ahupua'a* of Waimea, the park  
18 provides access to one of the last undeveloped *ahupua'a* on O'ahu. Waimea Valley is known  
19 for its natural beauty and cultural significance, featuring more than 6,000 rare species of plants  
20 and numerous Native Hawaiian archaeological sites. Park amenities include a visitor center,  
21 shops, restaurant and meeting space, an arboretum, botanical gardens, educational resources,  
22 Hawaiian cultural preservation areas, and hiking trails. The park is accessible to the public for a  
23 modest fee.

### 24 25 **3.3.1 Policies**

26  
27 The following policies relate to parks and recreational resources for the North Shore.

- 28
- 29 • Provide safe, suitable sites and facilities to meet resident and island-wide recreational  
30 needs for a variety of recreational activities on the North Shore.
  - 31
  - 32 • Expand recreational opportunities by providing greater access to recreational resources  
33 in the mountains, at the shoreline and in the ocean. Acquire and maintain additional  
34 lands for beach park development and *mauka* camping and hiking areas, as  
35 opportunities occur.
  - 36
  - 37 • Maintain and improve existing recreational areas and facilities to provide high quality  
38 recreational experiences for residents and visitors.
  - 39

- Base governmental expenditures for natural resources management and protection, including shoreline maintenance and improvements, on actual site usage (including visitors) rather than on resident population ratios or land values.
- Ensure that parks, recreational resources and recreational activities are compatible with the preservation and protection of open space, rural character, scenic, historic and cultural resources, and environmental quality. Wilderness and wildlife activities should be explored and promoted if appropriate.
- Provide safe and convenient access to parks and recreational resources.
- Ensure that parks and recreational resources are compatible with surrounding land uses.

### **3.3.2 Guidelines**

The following guidelines implement the policies for the recreational resources listed above.

#### **3.3.2.1 COMMUNITY AND NEIGHBORHOOD PARKS AND FACILITIES**

- Develop Hale'iwa Beach Park Mauka as a community-based park to expand active recreational facilities for North Shore residents.
- Acquire Pu'uiki Park for community use.
- Expand Waialua District Park by acquiring agricultural land across Goodale Avenue.
- If new residential development occurs, it should provide land for open space and recreation purposes at a minimum of two acres per 1,000 residents. Community-based parks (and associated service radius) include miniparks (one-half mile), neighborhood parks (one-half mile), community parks (one mile), and district parks (two miles).
- Locate community and neighborhood parks which emphasize intensive uses such as ball fields, playing courts, and community buildings in or adjacent to the neighborhoods or communities they serve, in order to maximize accessibility.
- Provide more youth activities, programs and facilities on the North Shore.

### 3.3.2.2 MAUKA AREAS

Additional guidelines for recreational resources in *mauka* areas are described in Section 3.1.2.1 pertaining to Mountain Areas. It should be noted that the State of Hawai'i is the main owner of these potential recreational lands and would be the most appropriate entity to implement these guidelines.

- Expand public access to the upland or *mauka* areas for appropriate types of recreational activities that are low-impact, resource-sensitive and do not compromise significant environmental resources and important agricultural activities. These would include nature-based activities such as picnicking, camping, hiking, mountain biking, hunting and the appreciation of scenic, natural and cultural resources.
- Acquire and maintain public and/or private campgrounds and hiking trails in the *mauka* areas.
- Develop a system of *mauka* trails and paths to interconnect the major recreational areas of the North Shore for use by non-motorized transportation modes, e.g., walking, biking, horseback riding.
- Coordinate planned private and public actions pertaining to trails and access. Identify historic trails and old government roads of cultural and recreational value to the public.

### 3.3.2.3 BEACH PARKS AND SHORELINE AREAS

Additional guidelines for recreational uses in shoreline areas can be found in Section 3.1.2.2 pertaining to Shoreline Areas.

- Limit new developments along the shoreline to parks and other compatible open space uses.
- Improve and expand public access to the shoreline at approximately one-half-mile intervals in rural areas of the North Shore, or at closer intervals of not more than one-quarter mile where justified by public demand, traditional use patterns, the quality of the recreational resources, emergency services response time, or to bypass natural barriers that impede public access to the shoreline.
- Maintain and expand lateral access along the coast, especially in areas with high recreational or scenic value, including the shoreline along Sunset Beach and Kawaiiloa where access to popular sandy beaches and surf spots is in demand.

- Limit uses within beach parks and nearshore ocean area uses to preserve overall environmental quality, rural character, scenic views, and open space.
- Provide adequate public parking and related support facilities (such as rest rooms and showers) at popular beach parks, including lifeguard equipment storage facilities in anticipation of increased lifeguard services needed at those parks. Improvements are planned for North Shore beach parks at Pu'uiki Beach, Laniākea, Chun's Reef, Kawailoa, Leftovers, Uppers, Kahawai, Banzai Rock, Kaunala, and Waiale'e.
- Acquire shoreline properties as opportunities arise or obtain public use easements and maintenance agreements with private landowners, especially lands adjacent to existing public parks.

#### **3.3.2.4 MAINTENANCE AND MANAGEMENT OF PARKS, RECREATION AREAS AND RECREATIONAL RESOURCES**

- Provide sufficient resources – including funding and manpower – to ensure that public facilities are adequately maintained.
- Base expenditures for the maintenance and management of existing parks and recreation areas on actual usage (including visitors) rather than on resident population ratios.
- Identify limitations on recreational resources and implement policies to regulate and mitigate impacts to these resources.
- Establish and enforce rules and regulations to mitigate conflicts among recreational activities.
- Engage public and private organizations in partnership with government agencies to maintain recreational resources.

#### **3.3.2.5 SITE DESIGN OF RECREATIONAL FACILITIES**

- Incorporate natural and/or cultural features of the site and use landscape materials that are indigenous to the area, where feasible, into the design of recreation facilities and areas.

- Locate uses which generate high noise levels away from existing and planned residential areas.
- Design and site improvements and landscaping to enhance the rural character and the aesthetic value of open space elements and natural resources.
- Provide pedestrian and bicycle pathways from surrounding streets to parks, to facilitate convenient access to the parks.
- Site parks and recreational attractions intended for regional or island-wide uses along or near regional roadways.
- Minimize environmental impacts (such as siltation, pesticide and fertilizer runoff) of recreational facilities and activities. Expansive recreational facilities, such as community and regional parks, should comply with State Department of Health guidelines related to ground and nearshore water quality.

### **3.3.2.6 RECREATIONAL ACTIVITIES THAT SUPPORT THE NORTH SHORE'S ECONOMY**

- Promote recreational and specialty events such as surf meets, fishing tournaments, bike tours, races and other competitions which contribute to the North Shore's economy. Such events shall meet State and City rules and regulations for park and ocean uses to avoid conflict with recreational uses.
- Manage impacts to the recreational resource and surrounding communities (such as noise, parking, traffic, etc.) associated with special events.
- Promote instructional programs, training clinics and other activities that cater to the health and recreation industry and which will not impact the North Shore's rural character.
- Explore the potential of equestrian activities, such as trail rides and riding adventures, as an adjunct to the area's attractions.
- Support equine activities through a variety of means, including establishment of well-designed, safe riding trail networks linking destinations in the rural communities and in the *mauka* areas that have long been used by riders. Cooperative agreements for the development and maintenance of such networks should be forged through public-private partnerships.

### 3.3.3 Relation to Open Space Map and Land Use Map

Major park sites are shown on the Open Space Map in Appendix A. While smaller neighborhood or support parks are not mapped, they are included in Exhibit 3.2 and cited where appropriate in the text.

## 3.4 HISTORIC AND CULTURAL RESOURCES

The North Shore contains several different types of historic and cultural sites and resources which are representative of its precontact, early history, and plantation eras. These sites and features are valuable as historic records and cultural resources. Table 3-6 lists historic features that are listed on the National and State Registers of Historic Places (also shown on Exhibit 3.1). In addition to these, the State Historic Preservation Division's maps and inventory of significant historic and cultural features, as well as the inventory maintained by the O'ahu Island Burial Council, list additional sites which may merit protection. These sources should be consulted for further information.

In addition to these resources, the Hale'iwa Special District and Waialua Town are historic and cultural resources. Policies and guidelines for these areas are included in Section 3.6.3 on Commercial Areas.

**Table 3-6**  
**National and State Register of Historic Places**

Tax Map Key	Site Name	Site Number	Hawai'i Register	National Register
5-8-01:15, 55	Kalou Fishpond	80-01-257	1/30/81	
5-9-05:68	Pu'u o Mahuka Heiau	80-01-249	1/29/81	12/29/62 1996 NHL *
6-6-13:12 (Portion)	Waialua School (Hale'iwa Elementary School)	80-04-1348	5/3/80	8/11/80
6-1-05:16	Kupopolo Heiau	80-01-241	9/5/78	6/4/73
6-2-01:02	Hale'iwa Beach Park	80-14-1388	6/9/88	
6-6-07:07	Pōhaku Lanai	80-04-226	11/26/86	
6-6-09:23	Waialua Courthouse	80-04-1334	2/20/79	
6-6-13:03 (Portion)	Waialua Fire Station	80-14-1346	7/19/80	12/2/80
6-9-02:06, 09	Ka'ena Complex	80-03-1183	6/9/88	
8-6-08:17	Keali'i o Ka Malu Church	80-04-9834	8/26/00	

\* NOTE: Pu'u o Mahuka Heiau was designated as a National Historic Landmark in 1996.

### 3.4.1 Policies

The following are policies for historic and cultural resources.

- Emphasize physical references to North Shore's history and cultural roots to help foster the area's unique sense of place.
- Protect existing visual landmarks and support the creation of new, culturally appropriate landmarks.
- Preserve and protect significant cultural and historic features from earlier periods.
- Retain, whenever possible, significant vistas associated with archaeological features.
- Respect significant historic resources by applying appropriate management policies and practices. Such practices may range from total preservation to integration with contemporary uses.
- Restore or keep intact sites with cultural and/or religious significance out of respect for their inherent cultural and religious values.
- Encourage public access and use of historic and cultural resources, where appropriate and feasible.

### 3.4.2 Guidelines

The treatment of a particular historic or cultural site should depend upon its characteristics and potential value. Appropriate treatments range from direct physical access and/or use of a site to limited visual contact. In some cases, adaptive reuse may be the only feasible way to preserve a site. In other cases, however, it may be highly advisable to restrict access to protect the physical integrity or sacred value of the site. The following guidelines should be used to determine appropriate treatment for cultural and archaeological sites.

- Implement in situ preservation and appropriate protection measures for sites that have high preservation value because of their good condition or unique, historic, cultural and archaeological features, and for which the State Historic Preservation Division has recommended such treatment.

- Consider the particular qualities of a site and its relationship to its physical surroundings when determining the appropriate treatment for a site. Determine the following on a site-by-site basis in consultation with the State Historic Preservation Division:
  - appropriate preservation methods;
  - appropriate delineation of site boundaries and setbacks; and
  - appropriate restrictions on uses and development of adjacent lands.
- Include input from all pertinent community resources in the development of a site preservation plan.
- Include sight lines and view planes that are significant to the original purpose and value of the site in criteria for adjacent use restrictions.
- Determine the appropriateness of public access on a site-by-site basis in consultation with the State Historic Preservation Division, Hawaiian cultural organizations, and the owner of the land on which the site is located.

### 3.5 RESIDENTIAL COMMUNITIES

Vital, contemporary communities oriented toward meeting the needs of their residents often offer a network of amenities to facilitate and enhance individual, family, and community life. At their best, they may offer parks and landscaped public open spaces, churches, community centers, and other places for social and civic functions, residences or other facilities for persons with special needs, and safe, pleasant bicycle and pedestrian connections that link homes and important destinations. While this plan refrains from prescribing what the specific ingredients of any given community should be, it takes this opportunity to cite the need, in each community, for appropriate elements which aid and enhance the overall quality of life of the community.

Residential areas on the North Shore are concentrated around the former plantation towns of Haleʻiwa and Waialua, with smaller clusters of residential neighborhoods scattered between Mokolēʻia, Kailua, Sunset Beach and the uplands above Pūpūkea. The Community Growth Boundary is intended to contain the spread of development away from significant agriculture and preservation areas. The need for additional housing on the North Shore will be met primarily by “infill” development of existing vacant lands within the Community Growth Boundary.

Table 3-7 presents North Shore housing trends from the 1990 and 2000 U.S. Census. Between 1990 and 2000, the North Shore’s housing inventory increased by about 25 percent, with nearly 1,400 new homes constructed during that period. The homeownership rate declined slightly, as indicated by the decrease in the percentage of owner-occupied units and the increase in the



percentage of renter-occupied units. In comparison to the housing growth between 1990 and 2000, the North Shore's resident population increased by 2,651 persons (from 15,729 to 18,380 people), representing a 16.9 percent growth rate. In general, the difference between the housing and population growth rates supports the increased number of vacant units and smaller household size reported in 2000.

**Table 3-7**  
**North Shore Housing Trends: 1990 to 2000**

Housing Data Category	1990	2000
Total Housing Units	5,287	6,648
Occupied Units	4,825 (91.3%)	5,893 (88.6%)
Owner-occupied Units	2,279 (43.1%)	2,595 (39.0%)
Renter-occupied Units	2,546 (48.2%)	3,298 (49.6%)
Vacant Units	462 (8.7%)	755 (11.4%)
Homeownership Rate	47.2%	44.0%
Household Size	3.18	3.05

According to the 2000 U.S. Census, the North Shore's housing inventory is comprised of mostly older homes. Slightly more than one-fourth (27 percent or 1,799 units) of the structures are greater than fifty years old, and another one-third (35 percent or 2,328 units) are more than 25 years old. Considering that the average age of the typical single-family home is 41 years old, a trend towards an increase in the number of home renovation and/or replacement projects in the near future is expected.

The median price of a single-family home sold on O'ahu in 2000 was \$295,000 and the median condominium price was \$125,000. In 2000, the median family income for the island of O'ahu was \$60,142, which was about \$11,000 over the median family income for the North Shore (\$48,948). Between 2000 and 2005, the median sales price of a single-family home on O'ahu increased nearly 103 percent to \$590,000 and the median condominium price increased nearly 115 percent to \$269,000.<sup>8</sup> Despite fluctuations in the real estate market, home prices on the North Shore have remained high, as the median price of a single-family home sold on the North Shore during the second quarter of 2009<sup>9</sup> was \$754,500 and the median condominium price was \$255,000. In contrast, an "affordable" single-family home for a family of four with an annual income of \$76,100 (80 percent of O'ahu's median income) would be priced at \$365,000,

<sup>8</sup> Honolulu Board of Realtors. "Annual Residential Resales Data for O'ahu 1985 - 2007."

<sup>9</sup> Honolulu Board of Realtors. "2009 2<sup>nd</sup> Quarter Residential Resales Statistics." Released July 1 2008.

1 assuming a 10 percent down payment and financing at 5.4 percent.<sup>10</sup> Under the same  
2 conditions, a family of four earning an annual income of \$95,125 (100 percent of O‘ahu’s  
3 median income) would be expected to afford a home priced at \$470,017, while a family of four  
4 with an annual income of \$114,150 (120 percent of O‘ahu’s median income) would be expected  
5 to afford a home priced at \$574,587.

6  
7 Inflated real estate values and the lack of affordable housing on the North Shore have made it  
8 difficult for many North Shore residents to purchase a home. In many cases, families that are  
9 unable to purchase homes are either moving away from the North Shore or resorting to multi-  
10 generational living arrangements – adding rooms to existing homes to accommodate extended  
11 families – as a way to afford the cost of housing.

12  
13 Current real estate trends have also affected the availability of affordable long-term rentals.  
14 With homeowners choosing to sell their rental properties and/or convert them into illegal short-  
15 term vacation rentals that bring in additional income, the supply of available rental units has  
16 decreased and rents have increased. Faced with a shortage of rental housing units, many  
17 residents who depend on rental housing are no longer able to afford to live on the North Shore  
18 and are moving to other parts of O‘ahu. As the North Shore continues to develop as a major  
19 visitor destination, the increased demand for visitor accommodations will further exacerbate the  
20 current problem of illegal vacation rental units (short-term vacation rentals and bed and  
21 breakfast establishments (B&Bs)) supplanting opportunities for long-term rentals.

22  
23 Attached, multifamily housing development concentrated around Hale‘iwa and Waialua Town  
24 centers is desired to ensure affordable and appropriately priced housing for existing residents,  
25 including low- and moderate-income groups and the “gap group” (e.g., those that make too  
26 much to qualify for affordable housing but cannot afford to purchase a home at the current  
27 market rate). Although single-family homes are the dominant housing type on the North Shore,  
28 multifamily building forms are necessary to provide housing options that allow existing families  
29 to stay on the North Shore without altering the integrity and density of existing neighborhoods.  
30 There is also strong community sentiment for the elimination of illegal vacation rental units in  
31 order to free up some percentage of those units for long-term rentals, thus adding to the  
32 available housing inventory without the need for excessive overbuilding.

33  

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<sup>10</sup> City and County of Honolulu Department of Planning and Permitting. “2009 Affordable Housing Income Limits and Maximum Prices by Income Groups and Household Size.” April 15, 2009 Memorandum.

Housing forecasts prepared by the Department of Planning and Permitting indicate the need for an additional 1,504 housing units by the year 2035 to support the projected population growth<sup>11</sup> (about 2,000 more people between 2005 and 2035). Despite a strong community desire for housing that is affordable to the average North Shore family, the development of an additional 1,504 new homes is not preferred because it would result in a significant growth in housing (nearly 25 percent more than the number of units in 2000). Community concerns include the potential impacts that the increased housing and population may have on the rural character, and open space and scenic resources.

### 3.5.1 Policies

The following policies are intended primarily to maintain and promote rural character in existing and new residential development:

- Maintain sufficient inventory of land within the Community Growth Boundary to accommodate existing and future housing needs.
- Direct future residential development to Hale'iwa and Waialua within the Community Growth Boundary, including new apartment districts adjacent to Hale'iwa and Waialua Towns where increased densities that address affordability may be desired, subject to community and agency review.
- Preserve and protect the rural character and natural features and setting of the North Shore by establishing appropriate development and subdivision standards for buildings, roadways and infrastructure systems, in contrast to existing urban standards. Incorporate rural standards that require development to be sensitive to and have minimal impact on the area's rural character.
- Provide a mix of housing types and prices to meet the needs of existing residents, including accommodations which are affordable to low- and moderate-income, gap group, and elderly households, and other special needs populations.
- Ensure safe and efficient circulation networks that provide bicycle and pedestrian travel between residential areas and neighborhood destinations such as schools, parks and neighborhood commercial facilities.

---

<sup>11</sup> It is assumed that only a small fraction of the 1,504 potential units will be built out, as development occurs at different rates in response to changing market conditions and housing development on the North Shore is constrained by infrastructure adequacy. In the unlikely event that all potential units are constructed, the North Shore's population for the year 2035 will be more than 1.8% of O'ahu's island-wide population, which is above the General Plan's population distribution policy for the North Shore (1.7% of the island-wide population).

- Support the development of sustainable communities through the use of low-impact development principles and technologies.

### 3.5.2 Guidelines

Except for small pockets of existing apartments in Mokulē'ia, almost all the housing on the North Shore consists of single-family residences. This plan recognizes three categories of residential development: Rural, Rural Residential, and Low-Density Apartment. Table 3-8 gives an overview of the density and height guidelines for planned and existing residential developments.

**Table 3-8**  
**Density and Height Guidelines by Residential Category**

<b>Residential Category</b>	<b>Density (Housing Units)</b>	<b>Building Height</b>
Rural	1 unit/acre	not over two stories/25 feet
Rural Residential	5-8 units/acre	not over two stories/25 feet
Low-Density Apartment	10-20 units/acre	not over three stories/40 feet

It is important that residential areas exhibit the physical characteristics of a rural context, including:

- Smaller building footprints, less lot coverage, and greater open space than encountered in more urbanized areas
- Alternative development patterns such as clustering and traditional compact layouts to preserve open space and minimize infrastructure demands
- Low-rise structures, generally not exceeding two stories
- Plantation style architecture
- Relatively narrow roadway widths
- Minimal amount of paved driveway surfaces
- Landscaping and design alternatives that reduce impervious surfaces, such as grassed swales rather than curbs and gutters, and

- Rural-oriented landscaping and fencing.

The City should utilize appropriate subdivision standards for roads and utilities in rural residential subdivisions. For example, current City subdivision rules and regulations require curb/gutter/sidewalks for most new subdivisions. These standards are essentially urban or suburban standards, but may not be appropriate for most “Country” subdivisions with one-acre lots or for subdivisions with R-20 or R-10 zoning located in rural areas. Standards for rural residential subdivisions should be studied. These rural type standards could result in less cost for the development of these subdivisions, and thus, more affordable lot prices for local families, as well as be more in keeping with the North Shore’s rural character.

### 3.5.2.1 RURAL

This category consists of single-family homes on relatively large lots (e.g., lots of one acre or more). Development is low density and generally consists of single-family homes, ancillary structures if necessary, low site coverage, and a large predominance of landscaped open space.

This designation allows agricultural activities and can also serve as a land use transition from the more densely developed rural residential neighborhoods to agricultural uses. Rural areas on the North Shore are within the Community Growth Boundary and consist of existing lands in the Country zoning district and a few infill parcels in Sunset Hills, Pūpūkea, and parts of Hale‘iwa. Single-family homes surrounded by open landscapes such as fields or tree cover, and largely unobstructed views and rural roadways are the principal visual qualities of these communities. Agricultural subdivision standards currently apply to country-zoned lands. As there is sufficient capacity on existing Country-zoned lands within the North Shore Sustainable Communities Plan area, no new Country lots should be allowed for the North Shore.

- Utilize a traditional density of one unit per acre with lots ranging in size from one to three acres, although alternative layouts that promote clustering are encouraged. Limit buildings to two stories or 25 feet, although the height may vary according to required flood elevation, slope, and roof form.
- Ensure compatibility between country-district uses and adjacent agricultural lands, natural resources, views, or cultural features.

### 3.5.2.2 RURAL RESIDENTIAL

This category is intended to describe the bulk of existing and new residential developments located within the Community Growth Boundary. Rural Residential areas are intended to

1 consist of single-family homes in rural settings, as well as higher densities (e.g., smaller lot  
2 sizes, multifamily homes) around Waialua and Hale'iwa Town cores. Typical residential lot  
3 sizes range from just less than one acre to about 5,000 square feet. Alternate development  
4 forms which result in greater amounts of open space and common facilities or higher densities  
5 that support affordable housing may also be used.

6  
7 A majority of the homes on the North Shore consist of low-density one- and two-story single-  
8 family attached and/or detached dwellings, ranging in size from 5,000-square-foot lots to  
9 20,000-square-foot lots. New residential single-family development may occur through infill  
10 development on existing residential-zoned vacant lots and larger residential-zoned parcels that  
11 can be subdivided, or in areas designated for new residential development contiguous to  
12 Waialua and Hale'iwa Towns. The Waialua Town Master Plan (2005) calls for 400-500 new  
13 homes in former plantation fields surrounding Waialua Town that lie within the Community  
14 Growth Boundary, including lands *mauka* of the mill camp between Pu'uiki Road and Goodale  
15 Avenue. In Hale'iwa, a maximum of 350 new housing units is to be accommodated on lands  
16 outside the flood plain north of Pa'ala'a Road.

17  
18 The expanded residential areas in Waialua and Hale'iwa are intended to respond to existing  
19 housing needs of residents and accommodate residential needs generated by anticipated long-  
20 term job growth in diversified agriculture and other industries. The intent of directing residential  
21 development to these areas is not to promote larger lots, which may make them unaffordable to  
22 area residents, or may encourage sprawl, but to allow for more site flexibility, integration of open  
23 space and neighborhood parks, and a joint infrastructure system for cost efficiency.

24  
25 The intent of the Rural Residential designation is to distinguish rural from urban residential  
26 development. It is anticipated that Rural Residential will carry development standards for  
27 roadways, building envelope, or other features that will convey rural rather than urban character.  
28 Although existing residential districts island-wide generally allow for a range of 3,500- to 20,000-  
29 square-foot lots (2 to 10 or 12 units per acre), the new rural residential areas in Hale'iwa and  
30 Waialua are intended to support densities ranging from 5 to 10 units per acre, so that they  
31 remain affordable and at the same time maintain the rural character, by adhering to the  
32 following guidelines:

- 33
- 34 • Densities range from five to eight units per acre, or up to 10 units per acre for alternative  
35 development options which enhance rural character and maximize consolidated, usable  
36 open space. Lot sizes range from 5,000 square feet to 10,000 square feet, allowing the  
37 application of optional design standards. For smaller lot developments of less than  
38 5,000 square feet, alternative clustering is encouraged.
  - 39
  - 40 • Use rural development standards to determine appropriate scale and character, smaller  
41 building footprints, greater setbacks, and more landscaping (use of hedges to create

walls and grassed front yards, and rural roadways with no sidewalks, curbs, and gutters).

- Avoid monotonous rows of garages and driveways along neighborhood street frontages by employing features such as varied building setbacks and shared driveways.
- Plan and design new or infill housing development, as well as modifications to existing homes, to be generally compatible with the predominant form and character of existing homes on adjacent properties and with the neighborhood as a whole.
- Use plantation architectural features such as pitched roofs in varied forms, exterior colors and finishes, building orientation, floor plans and architectural details to provide visual interest and individual identity and accentuate the rural setting. In general, buildings are to be less than two stories or 25 feet, although the height may vary in response to required flood elevation, slope, or other physical site constraints.
- Support affordable housing initiatives in areas designated for new housing development.

### 3.5.2.3 LOW-DENSITY APARTMENT

This category consists of predominately two- to four-story townhouse complexes, stacked flats, or low-rise apartment buildings. The existing apartment-zoned districts in Mokulē'ia are recognized. No new apartment districts in Mokulē'ia are recommended, although new apartment districts may be appropriate adjacent to Waialua and Hale'iwa town centers, where increased densities that address affordability are desired.

- Maintain the existing apartment district boundaries.
- Densities range from 10 to 20 units per acre. Buildings should not be more than three stories or exceed 40 feet in height.
- Where possible, enhance the compatibility of development within apartment districts with adjacent residential uses.
- Employ building form, orientation, location of entries and landscape screening that reflects single-family residential character and provides greater privacy and individual identity for housing units.
- Ensure compatibility of building scale, roof form and the quality of materials with those of adjacent residential areas.

#### 3.5.2.4 SPECIAL NEEDS HOUSING

Special needs housing does not indicate a specific housing or building type. Instead, it refers to facilities designed for certain segments of the population with special living requirements. Categories of special needs groups include low-income sectors, senior citizens, homeless, disabled people, and people with health problems or the need for other forms of special care. Often such housing includes special features and accessory support services, such as congregate dining and social rooms; laundry, housekeeping and personal assistance services; shuttle bus services for residents; skilled nursing beds or physical therapy clinics. Temporary shelters and transitional housing for homeless and low-income populations, permanent housing for persons requiring assistance to live independently, and emergency safe havens are types of facilities that provide special needs housing. There are a number of special needs housing facilities on the North Shore, including Helemano Plantation at Helemano.

- Locate special needs housing within or near Hale'iwa or Waialua Towns within close proximity to public transit, community services and commercial activities, but not so clustered together to create a significant change to neighborhood character, especially as viewed along collector roads.
- As an exception to standard density situations, special needs housing may have densities of up to 20 units per acre, not including beds in skilled nursing facilities, if they consist primarily of smaller dwelling units with residential scale and character. Proposals for special needs housing should be subject to community and agency review.
- Limit building heights in line with the region's rural character.
- Ensure compatibility of building scale, roof form, and materials with adjacent residential areas.

#### 3.5.3 Relation to Land Use Map

Residential areas are shown conceptually on the Land Use Map in Appendix A as follows:

**Rural.** This land use designation covers large lot residential development with lots ranging in size from one acre to three acres and includes lands generally consistent with the Country District of the City's Land Use Ordinance (LUO).

**Rural Residential.** This land use designation provides for the dominant housing form on the North Shore which consists of single-family detached dwellings on lot sizes under one acre.



1  
2 **Low-Density Apartment.** Concentrated primarily in Mokulē‘ia, apartment areas are recognized  
3 where they occur as a preexisting zoned use, but they are not designated on the Land Use  
4 Map. No new apartment areas are planned in Mokulē‘ia. New apartment districts may be  
5 allowed adjacent to Waialua and Hale‘iwa town centers subject to project-by-project review for  
6 compatibility with surrounding uses.

7  
8 **Special Needs Housing.** This land use is not specifically designated on the Land Use Map,  
9 but it is allowed in residential areas subject to project-by-project review for compatibility with  
10 surrounding uses.

11  
12 Nonresidential uses that are not specifically designated on the Land Use Map but are allowed in  
13 all residential areas include: elementary schools, parks, churches, community centers, child  
14 care centers, and other public facility and utility uses serving the area. It should be noted that  
15 some of these uses do require project review and/or public hearings and issuance of permits  
16 before they can be developed within a residential area.

## 17 18 **3.6 COMMERCIAL AREAS**

19  
20 A variety of commercial areas are present throughout the North Shore. These vary in size and  
21 type from small, individual, freestanding stores, groups of small stores along a main street in  
22 Hale‘iwa and Waialua, to small commercial centers. For purposes of this Sustainable  
23 Communities Plan, the various types of commercial uses are defined and designated in three  
24 categories: Country Town, Rural Community Commercial Center, and Country Store.

25  
26 As the largest of the three commercial types, country towns are the region’s primary commercial  
27 districts, and include a wide range of commercial establishments and civic activities to serve  
28 both area residents and visitors. The rural community commercial center is a smaller cluster of  
29 retail and service businesses, and country stores are freestanding neighborhood  
30 establishments. Both the rural community commercial center and country stores emphasize  
31 convenient and essential services to meet the needs of the surrounding community. Pedestrian  
32 and bicycle access is important for all commercial areas, while transit access is important for  
33 country towns and rural community commercial centers.

### 34 35 **3.6.1 Policies**

36  
37 The following policies apply to all commercial areas, including the expansion or renovation of  
38 existing commercial areas as well as to the development of new commercial facilities.

- 1 • **Scale and Purpose.** Ensure that commercial uses are appropriately scaled to be  
2 compatible with the region's rural character and surrounding land uses, with an  
3 emphasis on locally-owned small businesses. Maintain Hale'iwa as the region's primary  
4 commercial center and visitor attraction, with Waialua Town serving the local community.  
5
- 6 • **Physical Linkages and Accessibility.** Promote pedestrian, bicycle, and transit access.  
7
- 8 • **Appropriate Building Scale and Architectural Style.** Promote compatibility between  
9 the building mass of a commercial area and its rural and natural setting. The  
10 architectural character and scale of commercial areas should respect the surrounding  
11 rural and natural features, particularly when located adjacent to a residential area or  
12 significant natural or historic feature.  
13
- 14 • **Environmental Compatibility.** Emphasize environmental compatibility in the  
15 development and operation of commercial areas. Direct commercial enterprises to  
16 locate within existing commercial districts, and utilize sustainable building design and  
17 resource conservation measures as much as possible, including the use of solar panels,  
18 passive solar design strategies, landscaping features, and water constrictors, as well as  
19 on-site collection/storage areas to encourage individual property owners to recycle.  
20

### 21 **3.6.2 Country Towns**

22  
23 Country towns are generally distinguishable from their larger, often newer, urban counterparts  
24 by their compactness, small scale, and mixture of different land uses located in close proximity  
25 to each other. Buildings are usually one to two stories in height and built to the front property  
26 line. Commercial activity is often along the street frontage or in similar "main street" settings.  
27 Rural communities often take their identities from the character of their particular town center.  
28

29 The country town districts for Hale'iwa and Waialua identify the general area where commercial  
30 establishments as well as public services and civic activities are concentrated (see Exhibit 3.3).  
31 Hale'iwa serves as the region's primary commercial attraction. Waialua Town's commercial  
32 area provides Waialua and Mokolē'ia residents with convenient access to goods and services at  
33 a rural community scale and character. Although both are designated similarly as country  
34 towns, they have their own distinct attributes and character and are discussed separately below.  
35

36 **Hale'iwa.** Situated along Kamehameha Highway between Hale'iwa Beach Park and Weed  
37 Junction, the town serves as gateway to the North Shore as well as the region's major  
38 commercial center and attraction for visitors. The Anahulu Stream Bridge and Pacific Ocean  
39 are distinct physical elements that enhance the sense of character of Hale'iwa Town. The  
40 distant Ko'olau and Wai'anae Mountain Ranges and expansive plateaus of agricultural lands

1 present the image of a quaint rural town surrounded by agriculture and open space. The  
2 boundary for the Hale'iwa Country Town is generally coterminous with the Hale'iwa Special  
3 District, except for agricultural areas adjacent to Hale'iwa Beach Park, Hale'iwa Beach Park  
4 Mauka, and Loko Ea Pond which will remain outside the Country Town District. Current land  
5 uses within the Country Town District include a wide range of retail stores, restaurants, specialty  
6 shops, service establishments and professional offices. The continued success of Hale'iwa as a  
7 town center and visitor attraction will be dependent on its ability to preserve its rural town  
8 character while accommodating economic development and growth.

9  
10 **Waialua.** Waialua is a former plantation town oriented around the Waialua Mill site. The town  
11 core is concentrated around the existing shopping center and Dole office buildings and consists  
12 of shopping and civic facilities surrounded by residential neighborhoods, many of which are  
13 remnants of the old plantation camps. Centered around the intersection of Goodale Avenue  
14 and Kealohanui Street, the town core is anchored by the historic Bank of Hawai'i Building, the  
15 Waialua Public Library, and the Waialua Park and new Waialua Bandstand, which helps to form  
16 an entrance to the Waialua Mill site. With the closing of the Waialua Sugar Company in 1996,  
17 Waialua's future lies in strengthening its residential communities, retaining and highlighting the  
18 rich social, cultural and industrial heritage associated with the plantation industry, establishing  
19 agricultural support businesses as part of the overall development of diversified agricultural  
20 industry, promoting technology training within its schools and community, and revitalizing its  
21 town core through economic development that is compatible with the rural character of this  
22 community.

23  
24 The Waialua Town Master Plan was completed in 2005 to address future development and  
25 economic revitalization opportunities. The Plan recommends a series of physical improvements  
26 and actions – including revitalization of the existing shopping center, new public buildings,  
27 expansion of the farmers market, landscaping and pedestrian-oriented improvements, and infill  
28 and new residential development – to ensure the long-term viability of the town center and the  
29 larger Waialua community.



### 3.6.2.1 POLICIES

- Maintain Hale‘iwa and Waialua Towns as the main commercial districts on the North Shore. Encourage landowners to invest in the physical and economic revitalization of the towns’ commercial cores.
- Preserve and enhance the historic rural “small town” character and allow for a compatible mix of commercial, service industrial and residential uses that complement the rural town context. Encourage multifamily housing (low-density apartment districts) and housing for resident senior citizens in close proximity to both Hale‘iwa and Waialua town centers.
- Allow for a diverse range of civic, retail, office, and light industrial uses that meet the needs of residents and visitors.
- Support the continued viability of locally-owned small businesses, while prohibiting large commercial “big box” retailers that are contradictory to the region’s rural character.
- Maintain the low-rise (one to two stories) human-scale and physical organization of buildings arranged along the traditional “main street”.
- Preserve scenic views of agricultural fields and open spaces of surrounding areas seen from Hale‘iwa and Waialua Towns.
- Ensure that architectural and landscaping features are compatible with the rural character.
- Protect and enhance natural resources and ecosystems, such as wetlands and streams, fishponds, mature trees and open space areas, within the country town areas.
- Protect, preserve and – where feasible – restore historic and cultural features that reflect the North Shore’s heritage and contribute to the town’s identity.
- Allow for the development of small-scale visitor accommodations in Hale‘iwa Town.

### 3.6.2.2 GUIDELINES – HALE‘IWA COUNTRY TOWN

- Limit building heights to two stories, and employ building design elements which reflect the architectural characteristics of the early 1900-period architecture identified in the Hale‘iwa Special District Design Guidelines.

- Incorporate generous, functional, public and open spaces reflective of the town's agricultural heritage.
- Encourage commercial and related activities that are conducive to the pedestrian character to locate at the sidewalk level along Kamehameha Highway. Encourage less pedestrian-dependent and conducive activities (such as manufacturing areas for products and compatible light industrial uses, residences, services, etc.) to locate behind or above commercial activities so as not to detract from the commercial retail character of Kamehameha Highway.
- Focus the town's commercial core around a mix of compatible activities such as recreation, marine-related enterprises, farmers' markets, historic and cultural attractions, "clean" light industrial, small businesses and offices, civic and governmental services, businesses and retail activities for both residents and visitors.
- Upgrade drainage, wastewater, and water infrastructure within Hale'iwa Town, as needed.
- Support home-based businesses and "Mom and Pop" type stores within the town center.
- Concentrate new development near existing built areas emphasizing redevelopment and infill along Kamehameha Highway, *makai* of the Hale'iwa Bypass Road (Joseph P. Leong Highway). Provide adequate landscaped buffer adjacent to the bypass.
- Ensure that commercial uses adjoining the Kamehameha Highway corridor include support facilities such as parking lots and rest rooms that can adequately accommodate the planned commercial activities.
- Support the expansion and enhancement of Hale'iwa Harbor. If possible, integrate the harbor's attractions and facilities with commercial activities in Hale'iwa Town.
- Expand indoor recreational and educational facilities and programs (museums, movie theater, gym, and cultural performance theaters) and historical, cultural, and arts programs to further enrich Hale'iwa's civic core.
- Provide improved, expanded, and continuous pedestrian walkways linking commercial establishments within Hale'iwa, including connections between farmers' markets or other kinds of agricultural product and retail outlets, and open space and environmental resources (such as beach parks, Hale'iwa Harbor and Loko Ea Pond).



- Enhance the attractiveness and general landscaped open space character of the area by providing roadway improvements, street trees, streetlights, street furniture, and signage compatible with the rural character of Hale'iwa Town.
- Continue to use and support production of the visitors' map showing attractions and services in Hale'iwa.
- Maintain Kamehameha Highway as a two-lane thoroughfare through Hale'iwa Town.
- Consolidate off-street parking to areas behind buildings, while retaining existing on-street parking wherever possible and appropriate. As needed, parking should be rearranged to accommodate the pedestrian walkway system along Kamehameha Highway.
- Provide signage and other forms of orientation to help direct motorists through the town to major facilities and to off-street parking facilities.
- Improve conditions for transit and bicycling through Hale'iwa Town by providing better designed and located bus stops, and a designated bike lane through the town.
- Enhance Weed Junction and Kamehameha Highway/Joseph P. Leong Junction, which are entry points to Hale'iwa, in a manner which conveys their gateway functions through appropriate design, landscaping, signage and painting.
- Encourage private and community-based initiatives to protect and enhance the streams, wetlands, and other natural resources within Hale'iwa Town. Retain the agricultural use adjacent to Weed Junction and the Preservation designation at Loko Ea Pond.

### 3.6.2.3 GUIDELINES - WAIALUA COUNTRY TOWN

- Ensure new developments are consistent with the Waialua Town Master Plan recommendations for the town center (Chapter 4.0 of the Waialua Town Master Plan).
- Integrate neighborhood parks and community-oriented recreation areas into new residential development.
- Locate churches and public services in or near the town.

- 1 • Retain large, readily accessible open spaces where outdoor recreation facilities and  
2 neighborhood gardens create open vistas and green spaces. Retain open space  
3 entrances to the town core, including Weed Junction, Thompson Corner, and Waialua  
4 Beach Road, with Waialua Park as the entrance to the country town district.  
5
- 6 • Incorporate significant historic features from the plantation era and earlier periods into  
7 new developments, where feasible and appropriate. Existing buildings of historical,  
8 cultural and/or architectural significance, such as the surviving elements of the Waialua  
9 Mill, should be preserved and maintained through rehabilitation and adaptive reuse.  
10 Where feasible, adapt and highlight these structures as landmarks and icons  
11 representative of Waialua's plantation town history.  
12
- 13 • While buildings in the commercial core may be two stories in height, one-story heights  
14 should be emphasized, in keeping with the area's historic scale and to preserve the  
15 prominence and views of existing mill structures.  
16
- 17 • New commercial buildings should be similar in architectural character, scale and  
18 materials to historic structures such as the former Waialua Sugar Company offices and  
19 the Waialua Library.  
20
- 21 • Use design guidelines described in the Waialua Town Master Plan to promote and  
22 develop a special image for Waialua's commercial and industrial core that reflects the  
23 town's historic character and reinforce the town's role as the cultural and business  
24 center for Waialua. Encourage renovations and new construction in accordance with the  
25 design guidelines.  
26
- 27 • Provide pedestrian and bicycle access between surrounding residential neighborhoods  
28 and Waialua's commercial core.  
29
- 30 • Encourage infill development and new commercial development around Kealohanui  
31 Street to strengthen the town core and provide the critical mass necessary in developing  
32 a healthy town center.  
33
- 34 • Direct new residential development outside but adjacent to the town core, as generally  
35 indicated on the Land Use Map.  
36
- 37 • Locate industrial uses around the former sugar mill (see Section 3.7 Industrial Areas for  
38 applicable policies and guidelines).  
39

- 1 • Promote agricultural support activities at the agricultural support area adjacent to the mill  
2 site.
- 3
- 4 • New housing units should incorporate rural features (such as small building footprints,  
5 larger setbacks, and more landscaping) and be sited and organized to give a strong  
6 sense of community.
- 7
- 8 • Work with developers to establish housing programs that place high priority on the  
9 needs of existing Waialua residents.
- 10
- 11 • Provide job or entrepreneurial opportunities for area residents, and make available  
12 training programs for new jobs and businesses.
- 13
- 14 • Promote historical and cultural attractions such as museums or activity centers that  
15 illustrate the history of the community or feature current agricultural operations near the  
16 mill site to encourage visitors to Waialua Town.
- 17
- 18 • Encourage computer-oriented, high technology business, health care, and medical  
19 services to locate in Waialua.
- 20
- 21 • Provide for safe and pleasant pedestrian circulation along the storefronts. As it  
22 redevelops, emphasize pedestrian circulation along Kealohanui Street. Retain a  
23 distinctive pedestrian-oriented commercial area for residents and visitors through the  
24 use of signage, street furniture, and street tree plantings to encourage walking and  
25 biking.
- 26
- 27 • Support production of a map showing services in Waialua and attractions in the region,  
28 such as Ka'ena Point and nearby beach parks.
- 29
- 30 • Promote Kealohanui Street as a pedestrian-oriented promenade in Waialua.
- 31
- 32 • Link proposed pedestrian walkways to the Waialua Town core, including linkages to  
33 farmers' markets and other kinds of agricultural products and retail outlets.
- 34
- 35 • Provide convenient parking that should be landscaped and screened from roadways.
- 36
- 37 • Enhance Waialua Beach Road and Farrington Highway as gateways to Waialua Town  
38 through signage and landscaping.
- 39

- Plant street trees to enhance the pedestrian experience and to create a strong streetscape image. A detailed street tree and planting plan should be developed and implemented as part of the right-of-way plan.

### **3.6.3 Rural Community Commercial Center**

The rural community commercial center is a small cluster of commercial and service businesses located on major thoroughfares that provide a range of goods and services to meet the needs of the surrounding residential communities. Located along highways and major thoroughfares, these centers also attract visitors and residents from outside the immediate community. Commercial establishments may include grocery stores, sundries stores, restaurants and other services and shops catering to residents and visitors to the region. They are generally one- and two-story in height and equivalent in size to neighborhood grocery stores. With fewer business establishments and services than a country town, the rural community commercial center typically covers less land area and has less commercial floor area than a country town. The area between the existing Foodland market and the adjacent commercially zoned properties between Pūpūkea Road and Pāhoe Road is designated as a Rural Community Commercial Center.

#### **3.6.3.1 POLICIES**

- Cluster commercial uses within a more concentrated, but small-scale commercial center on existing Commercial-zoned lands, rather than dispersing them along the highway.
- Ensure that commercial buildings reflect the rural character and are compatible with adjacent residential areas.
- Promote safe and convenient transit, pedestrian, and bicycle access between commercial centers and surrounding areas.
- Emphasize commercial and civic establishments that serve the immediate residential community.

#### **3.6.3.2 GUIDELINES**

- Limit rural community commercial centers to existing zoned areas between Pūpūkea Road and Pahoe Road that currently serve the commercial needs of residents and visitors.

- Design rural community commercial centers to provide a compact and efficient organization of various commercial services which primarily serve the immediate community.
- Rural community commercial centers should be designed to provide a compact and efficient organization of various commercial services.
- Architectural scale and character should respect the surrounding natural features, and adjacent residential areas. Buildings should reflect a rural character compatible with surrounding open spaces and adjacent residential uses.
- Limit building heights to no more than two stories.
- Locate parking behind buildings or provide parking that is landscaped. Parking should be visually screened from the street and adjacent residential lots, by planting a landscaped screen of trees and hedges along street frontages and property lines and planting shade trees throughout the parking lot.
- Incorporate pedestrian and bicycle facilities, including bicycle paths and storage racks, and off-site improvements such as crosswalks.
- Site bus stops in close proximity to rural community commercial centers.

### 3.6.4 Country Stores

This category generally refers to freestanding retail or eating establishments located on commercially zoned lands or which exist as nonconforming uses. Its purpose is to recognize such establishments and to provide guidance for renovation, reconstruction, or minor expansion of these facilities. It is not intended to provide for new country stores. Existing country stores include stand-alone retail or eating establishments on Commercial-zoned lands and /or nonconforming uses. They include Ted's Bakery, Sunset Beach Store/Restaurant, Sharks Cove Shell Station, Chun's Market, Pa'ala'a Kai Center, Otake Store and Waialua Service. With storeowners retiring and rising operating costs affecting businesses, several country stores have closed in recent years, including Kammie's Market and Sagara Store in Waialua.

Country stores are typically single, stand-alone establishments. They are usually one-story in height and are generally equivalent in size to a small neighborhood grocery store, such as those mentioned immediately above, that provides convenience goods and services to the surrounding community. Building character is typically residential in scale and generally harmonious with adjacent development and setting in form, material, finishes, and color.

#### 3.6.4.1 POLICIES

- Prohibit the establishment of new sites for country stores.
- Ensure that proposals for renovations or reconstruction of existing country stores complement the needs of the surrounding community and are compatible with adjacent residential communities.
- Support the long-term viability and existence of country stores.

#### 3.6.4.2 GUIDELINES

- Design country stores to be small-scale, freestanding, compact commercial facilities. Prohibit country stores from expanding to larger, continuous commercial strip types of developments along arterial roads.
- Limit country stores primarily to retail uses that provide services to the surrounding community.
- Architectural scale and character should respect the surrounding natural features, and adjacent residential areas. Buildings should reflect a rural character compatible with surrounding open spaces and adjacent residential uses.
- Limit building heights to one story.
- Locate parking behind buildings, or provide parking that is landscaped. Parking should be visually screened from the street and adjacent residential lots, by planting a landscaped screen of trees and hedges along street frontages and property lines and planting shade trees throughout the parking lot.
- Promote pedestrian and bicycle access to country stores.
- Assist business owners with maintaining their financial stability to ensure that country stores remain in operation.

#### 3.6.5 Relation to Land Use Map

Commercial areas are shown conceptually on the Land Use Map in Appendix A as follows:



**Country Towns.** This land use designation identifies the two primary country town districts on the North Shore: Hale'iwa and Waialua.

**Rural Community Commercial Center.** The single rural community commercial center identified on the Land Use Map is the area between Pūpūkea Road and Pāhoehoe Road which consists of the Foodland store and adjacent Commercial-zoned property.

**Country Stores.** This land use designation refers to existing country stores that provide commercial services to the surrounding communities. Due to their relatively small scale, their locations are not depicted on the Land Use Map.

### 3.7 INDUSTRIAL AREAS

The North Shore, especially Waialua Town, was built and populated primarily to service the sugar industry, which for many decades was the predominant economic force in the region until recent years. While most of the agricultural lands were used for cultivation, some lands were dedicated to related operations such as harvesting and processing, and were thus designated industrial. Industrial lands provide for activities and services such as manufacturing, food and agricultural processing, boat and car repair, and the storage of materials and products. They provide employment opportunities for area residents as well as goods and services for consumption. Industrial uses can help revitalize the area's economy and maximize residents' choice of employment opportunities in the region.

The industrial site at the former Waialua Sugar Mill is no longer used for sugar processing and has been renovated for other industrial uses, including diversified agriculture-related light industrial uses, clothing and souvenir manufacturing, surfboard manufacturing and repair, warehousing, wholesale activities, and other compatible industrial-type uses. The long-term goal is to ensure that the supply of industrial-zoned lands is adequate to accommodate the mix of industrial, light industrial, retail and service-oriented uses that would benefit from locating within the Sugar Mill site. Appropriate types of light industrial uses that complement commercial-related activities can also be accommodated in Hale'iwa and Waialua Country Town Districts.

#### 3.7.1 Policies

The following policies are applicable for industrial areas:

- Encourage compatible industrial uses that help diversify and revitalize the economic base of the region. Industrial uses should be compatible with the rural character, with

1 minimal impact on the natural environment, cultural resources, open spaces and scenic  
2 views.

- 3
- 4 • Promote industries that provide employment opportunities as well as goods and services  
5 for area residents.
- 6
- 7 • Establish the former Waialua Mill site as the North Shore's main industrial center. Direct  
8 industrial activities, including boat repair, auto body and fender shops, to the Waialua  
9 Mill site.
- 10
- 11 • Promote forms of economic development and business enterprises that offer training  
12 and technical skill development to area residents. Promote agricultural support activities  
13 such as food processing and packaging, as well as "quiet" industries, such as cold  
14 storage and clothing manufacturing, computer hardware or software development, or  
15 other forms of high technology enterprises that provide job or entrepreneurial  
16 opportunities for area residents and are compatible with the rural character.
- 17

### 18 **3.7.2 Guidelines**

19  
20 The following guidelines are applicable to industrial development.

- 21
- 22 • Maintain adequate open buffer zones between industrial activities and residential  
23 districts.
- 24
- 25 • Minimize impacts (views, noise and smells) and reduce the visibility of large building  
26 masses, machinery elements, parking, storage areas, industrial equipment and  
27 operation areas through proper site planning and landscape plantings.
- 28
- 29 • Encourage uses which have few environmental impacts and those which complement  
30 the development scale of the surrounding community.
- 31
- 32 • Allow low-impact, service industrial uses in enclosed buildings within the Hale'iwa and  
33 Waialua Country Town Districts, so as not to detract from the pedestrian-oriented  
34 commercial/retail character of roadways, such as Kamehameha Highway, Kealohanui  
35 Street, and Goodale Avenue. These could include manufacturing of clothing, arts and  
36 crafts and surfboard repair.
- 37
- 38 • Building height and form should reflect the contexts of their sites. At the Waialua Mill  
39 site, they should follow guidelines reflecting the Mill's image. In Hale'iwa Town, they  
40 should follow the Hale'iwa Special District Design Guidelines. In Waialua Town, they

1 should be consistent with guidelines of this document and the Waialua Town Master  
2 Plan. In general, buildings should be designed to reflect the architectural character of  
3 Hale'iwa or Waialua Town. Basic design principles, texture, construction materials, and  
4 colors should be compatible with the styles from the era and surrounding buildings.  
5

- 6 • Where taller vertical structures are required as part of an industrial operation, site and  
7 design such structures to minimize impacts on view planes and reduce visibility from  
8 scenic vistas, public roadways, residential areas, commercial areas, parks, and other  
9 significant open space areas.
- 10
- 11 • Limit industrial uses located along the shoreline to water-dependent activities (such as  
12 boat repair and maritime-related activities). Consider environmental, visual, and noise  
13 impact during the permit application process.
- 14
- 15 • Maintain and upgrade infrastructure to support industrial facilities.
- 16

### 17 **3.7.3 Relation to Land Use Map**

18  
19 One industrial area is shown conceptually at the Waialua Mill site on the Land Use Map in  
20 Appendix A. Future expansion of the industrial area should be accommodated *makai* of the mill  
21 site. In addition to the industrial-designated lands, compatible types of light industrial uses may  
22 also be permitted within the country town districts at Hale'iwa and Waialua if they meet the  
23 policies and guidelines described in this section and in Section 3.6 relating to Commercial  
24 Areas.

## 25 26 **3.8 VISITOR ACCOMMODATIONS**

27  
28 The availability of existing legal overnight accommodations for visitors on the North Shore is  
29 limited, consisting of a small inn/hostel offering budget accommodations (Backpackers Vacation  
30 Inn and Plantation Village), several privately operated camps with campgrounds and cabins,  
31 B&B establishments, and vacation rentals (both homes and condominium properties). The only  
32 hotel along O'ahu's northern shoreline is the Turtle Bay Resort, a four-star luxury property at  
33 Kawela Bay, which is located within the Ko'olau Loa Sustainable Communities Plan area.

34  
35 An increase in the number of visitors seeking affordable vacation opportunities on the North  
36 Shore, combined with the limited inventory and absence of moderate-priced, mid-quality  
37 overnight accommodations, has resulted in the growth of illegal short-term vacation rentals.  
38 Many North Shore residents are concerned that using homes as vacation rentals results in  
39 noise, traffic and parking problems for neighboring homes, and disrupts the stability and  
40 character of a community due to the transient nature of the tenants. Due to the incompatible

1 nature of vacation rentals, real estate market pressures (e.g., increased real estate values and  
2 rental prices, reduced availability of long-term rental units), and the limited capacity of existing  
3 infrastructure systems and public services – including overly crowded roads, wastewater issues,  
4 and limited police presence – the community expects, if not insists on, appropriate regulatory  
5 and enforcement mechanisms for the vacation rental industry. Furthermore, the community  
6 feels strongly that any additional overnight accommodations for visitors in the North Shore  
7 Sustainable Communities Plan area should be prohibited until community concerns about illegal  
8 vacation rentals are resolved and enforcement mechanisms to eliminate the current illegal  
9 operations are in place.

10  
11 In general, residents support the concept of affordable, short-term accommodations for tourists,  
12 local families and off-island contractors needing lodging in the area (noting that overnight  
13 accommodations would keep visitors in the region longer, eliminate the evening commute to  
14 hotels/lodging in other parts of the island, and provide choices for the cost-conscious traveler).  
15 Any new visitor accommodations should be small in scale and compatible with the rural  
16 character of the built environment and adjacent natural features. An appropriate type of visitor  
17 accommodation would be located within the boundaries of the Hale'iwa Country Town District  
18 and be similar in scale as the historic Hale'iwa Hotel. The Hale'iwa Hotel opened in 1899 on 40  
19 acres of land at the mouth of the Anahulu River (where the Hale'iwa Joes Restaurant now sits).  
20 Commissioned by Benjamin Dillingham, owner of the OR&L Company Railroad, the hotel was a  
21 popular weekend "country retreat" for Honolulu's affluent at the turn of the century. Hotel guests  
22 would travel the three-hour, 56-mile journey from Honolulu to Hale'iwa on the OR&L Company's  
23 train, and stay overnight at the resort destination. The main Victorian-style two-story building  
24 featured 14 guest rooms with deluxe accommodations, and several guest cottages. Following  
25 the hotel's closure in 1928, the property was reopened in 1931 as an exclusive private club (the  
26 Hale'iwa Beach Club). It was used as an officer's club during World War II, and eventually torn  
27 down in 1952.<sup>12</sup>

28  
29 Considering that Hale'iwa has been a tourist destination since 1899 when the Hale'iwa Hotel  
30 was first opened, the return of a similar country inn in Hale'iwa can serve as a valuable link that  
31 honors Hale'iwa's heritage, adding to the town's historic character and further promoting efforts  
32 to revitalize the town's core. Although the community opposes large-scale visitor  
33 accommodations and resort zoning on the North Shore, small-scale visitor accommodations  
34 may be allowed within Hale'iwa Town and Waialua Town Center provided that any such projects  
35 should not be allowed through a conditional use permit or through any other permitting process  
36 that does not require approval of the City Council under a process to be created under the Land  
37 Use Ordinance which includes opportunity for public input and public hearings and based on  
38 specific criteria which are outlined in the policies and guidelines below.

39  
<sup>12</sup> Hibbard, Don. Designing Paradise: The Allure of the Hawaiian Resort. New York, 2006.

1 It is the general desire of the North Shore community not to have more than one small country  
2 inn in Haleiwa and no more than one small country inn in Waialua.

3  
4 Resort zoning is not appropriate for the North Shore.  
5

### 6 **3.8.1 Policies**

7  
8 The following policies are applicable to visitor accommodations:  
9

- 10 • Integrate small-scale visitor accommodations in the form of a small country inn (no more  
11 than one in Hale'iwa and one in Waialua) with the social and economic life of the  
12 surrounding communities and to be compatible with adjacent uses.  
13
- 14 • Avoid degradation or elimination of public access to public lands or resources by visitor  
15 accommodations.  
16
- 17 • Prohibit amenities and necessary activities typically associated with destination-style full-  
18 service resorts, such as nightclubs, convention centers, shopping facilities and banquet  
19 facilities.  
20
- 21 • Prohibit the proliferation of visitor accommodation projects that would take over the  
22 social and economic character of Hale'iwa Town and Waialua Town Center.  
23
- 24 • Prevent the expansion of the B&B and vacation rental industry on the North Shore.  
25

### 26 **3.8.2 Guidelines**

27  
28 The following are guidelines pertaining to visitor accommodations. Other forms of overnight  
29 visitor accommodations that do not meet these guidelines are generally not complementary to  
30 the North Shore's rural character, and are not desired in the community – and are not to be  
31 permitted.  
32

- 33 • Allow a small country inn only in Hale'iwa Town and the Waialua Town Center to help  
34 restore and promote the historic character of the towns.  
35
- 36 • Design the small country inn in Hale'iwa to be consistent with the Hale'iwa Special  
37 District Design Guidelines. In general, the small country inn should be small in scale  
38 (limited to two stories in height), be compatible with the architectural style and character  
39 of Hale'iwa Town, and observe the same building envelopes and design standards of  
40 adjacent buildings.

- Any proposed small country inn must follow all ordinances pertaining to zoning, density and other applicable rules. As there is no ordinance currently governing small country inns in either Hale'iwa or Waialua Towns, such an ordinance must be in place and approved by the City Council prior to any approvals for either small country inn to be built.
- Establish locational, spacing or density limits to control the overall proliferation of visitor accommodations.
- Provide convenient and safe access for pedestrians and vehicles.
- Incorporate mixed use that caters to pedestrian activity located on the ground floor and visitor accommodations provided on the upper floor.
- Provide adequate off-street parking which is landscaped and screened from public roadways.
- Address the streetscape and provide a setting that is conducive to pedestrian activity, when located along pedestrian-oriented streets.
- Ensure that existing and/or proposed infrastructure can adequately accommodate the proposed development and associated visitor population.
- Minimize impacts (noise, traffic, parking, visual) on surrounding activities/properties and from public roadways.
- Prohibit the granting of new permits, including nonconforming use certificates, for B&B and vacation rental operations on the North Shore.

### **3.8.3 Relation to Land Use Map**

The visitor accommodations described above are not shown on the Land Use Map in Appendix A. As specified, they should be allowed only within the Hale'iwa Country Town District and in the Waialua Town Center, subject to policies and guidelines outlined in the preceding section and in accordance with applicable criteria and standards.

## 3.9 INSTITUTIONAL USES

The purpose of designating lands for institutional uses is to provide areas for public and quasi-public institutions such as schools, airports, harbors, major health care facilities; major utility plants and substations; landfill sites, corporation yards, and maintenance yards of public agencies; religious, social, and social service institutions; and other public services.

### 3.9.1 Policies

Public facilities and institutions should provide convenient public services or functionally support other governmental activities. These facilities should be planned and developed in a manner consistent with the rural character of the region and sensitive to the surrounding community land uses.

### 3.9.2 Guidelines

The following guidelines implement the policies for institutional facilities listed above.

- Colocate neighborhood or community parks with elementary or intermediate schools and coordinate design of facilities when efficiencies in development and use of athletic, meeting and parking facilities can be achieved.
- Colocate social, social service institutions, and other public service agencies to provide convenient one-stop services to the region.

### 3.9.3 Relation to Land Use and Public Facilities Maps

Institutional areas and major public facilities (both existing facilities and future improvements) are identified by appropriate symbols on the Public Facilities Map located in Appendix A. Religious, social, social service institutions, and other public service uses are not conceptually shown on the Land Use Map but are permitted within the commercial areas and residential communities if the uses comply with the City's Land Use Ordinance.

## 3.10 MILITARY

Military areas include all lands used for military and military support purposes including residential, commercial, industrial and park uses. The Heleman Military Reservation, with its existing and planned military housing, related community facilities and industrial uses, and the



1 Kawaiiloa Training Area and Dillingham Military Reservation are lands owned and leased by the  
2 military on the North Shore.

### 3 4 **3.10.1 Policies**

5  
6 Applicable policies for residential, industrial, commercial, and other related uses should be  
7 applied to military lands.

### 8 9 **3.10.2 Guidelines**

- 10
- 11 • Encourage all government agencies (City, State and Federal) to coordinate efforts with  
12 the U.S. military, especially where the Kahuku and Kawaiiloa Training Areas overlap with  
13 environmentally sensitive areas.
  - 14
  - 15 • Encourage the military to provide appropriate infrastructure services to support military  
16 uses on their lands and minimize any potential impacts to the region.
  - 17
  - 18 • Work with the military to allow use of Drum Road as an emergency access bypass route  
19 during natural disasters or other emergency incidents.
  - 20
  - 21 • Encourage low-rise military facilities that support educational and recreational programs  
22 and are compatible with the region on Military Reservation lands such as Dillingham  
23 Airfield.
  - 24

### 25 **3.10.3 Relation to Land Use Map**

26  
27 Helemano Military Reservation and Dillingham Airfield are shown conceptually on the Land Use  
28 Map in Appendix A. Other military uses within the region not specified on the Land Use Map  
29 should be compatible with the policies and guidelines of the specific land use designation shown  
30 on the Land Use Map. Military-owned lands that are leased or licensed to others on a full-time  
31 basis for non-military uses are excluded from this designation.

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## 4. PUBLIC FACILITIES AND INFRASTRUCTURE POLICIES AND GUIDELINES

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The vision for the North Shore described in Chapter 2 will be implemented in part through application of the policies and guidelines for public facilities and infrastructure which are presented in the following sections.

The provision of adequate infrastructure and public facilities and services is essential to maintaining the quality lifestyle that residents desire. For the North Shore, this means that infrastructure systems, public facilities and services are properly maintained and operated, that they are sufficient to meet current requirements, and that they have the capacity to accommodate future system demands without negatively impacting any of the region's resources. A key concern for area residents is that the design of infrastructure systems – including roadways and wastewater treatment systems – reflect the rural qualities of the region, with particular emphasis on how such systems are sized. As a corollary concern, the impacts of development that occur beyond the North Shore Sustainable Communities Plan's boundaries are important considerations when analyzing entitlement requests that affect North Shore infrastructure. Thus, the North Shore community expressed its concerns about any further expansion of resort accommodations in the Turtle Bay complex because of the potential adverse impacts such development may have on the North Shore's infrastructure, particularly on Kamehameha Highway, and on its quality of life.

A survey conducted by the State of Hawai'i Department of Economic Development and Tourism for two separate time periods – Winter 2003 and Summer 2005 – indicates that more than half (51%) of all visitors to O'ahu in 2003 and 2005 visited the North Shore.<sup>13</sup> This translates into an estimated 2.4 million tourists per year visiting the North Shore, or almost 7,000 visitors per day on average,<sup>14</sup> which is about 40% of the total number of residents living on the North Shore in 2005 (about 18,400 residents).<sup>15</sup> Although the effect is economically positive, the dramatic influx of tourists to the North Shore has significantly stressed the community's infrastructure with increasing traffic congestion, overcrowded beaches and park facilities, and insufficient rest room facilities in Hale'iwa Town.

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<sup>13</sup> State of Hawai'i Department of Business, Economic Development and Tourism. "Visitor Behavior and Satisfaction O'ahu's North Shore: A "Tack On" Survey to the 3<sup>rd</sup> Quarter 2005 and 4<sup>th</sup> Quarter 2003 Visitor Satisfaction Survey."

<sup>14</sup> The 2005 Annual Visitor Research Report prepared by the State of Hawai'i Department of Business, Economic Development and Tourism indicates 4,731,843 visitors to O'ahu in 2005 (Table 37).

<sup>15</sup> City and County of Honolulu Department of Planning and Permitting. "2000-2030 Socioeconomic Projections in 5 Year Intervals by Development Plan Area." November 2007.

Chapter 4 is organized under the following headings:

SECTION

4.1 TRANSPORTATION SYSTEMS

4.2 WATER SYSTEMS

4.3 WASTEWATER TREATMENT

4.4 ELECTRICAL SYSTEMS

4.5 SOLID WASTE HANDLING AND DISPOSAL

4.6 DRAINAGE SYSTEMS

4.7 SCHOOL FACILITIES

4.8 PUBLIC SAFETY FACILITIES

4.9 OTHER COMMUNITY FACILITIES

## 4.1 TRANSPORTATION SYSTEMS

This section describes the existing road, transit, and bikeway network on the North Shore, as well as plans and proposals for future improvements, followed by policies and guidelines to guide future transportation system development in the North Shore. These elements are shown in the Public Facilities Map in Appendix A.

Act 54 (Session Laws Hawai'i, 2009) requires State and County transportation departments to adopt and implement a complete streets policy and establishes a task force to determine necessary standards and guidelines. The intent of a complete streets policy is to create and configure a connected street system that provides for all users, including but not limited to, pedestrians, bicyclist and transit passengers of all ages and abilities.

### 4.1.1 Roadway Network

The only major arterial on the North Shore is Kamehameha Highway, a two-lane thoroughfare which links North Shore communities with Central O'ahu and Ko'olau Loa. It is a scenic highway which traverses the coastline from Hale'iwa through the communities of Kawaihoa, Waimea, Pūpūkea, and Sunset Beach.

Minor arterials on the North Shore include Kaukonahua Road and Farrington Highway. Kaukonahua Road is a narrow two-lane roadway which goes from Wahiawā north to Thompson Corner and continues as Farrington Highway past Waialua and Mokulē'ia to Ka'ena Point. Numerous local streets, including Hale'iwa Road, Goodale Avenue, Waialua Beach Road, and Pūpūkea Road, serve the rural residential communities. Kamehameha Highway, except for the segment from Weed Junction to Hale'iwa Beach Park, Farrington Highway, and Kaukonahua Road from Thompson Corner to Weed Junction, are under State jurisdiction. Except for former

cane haul roads, most of the remaining streets in the North Shore Sustainable Communities Plan area are under City and County of Honolulu jurisdiction.

Planning and development of major roadways is the shared responsibility of the State Department of Transportation (DOT) and the City Department of Transportation Services (DTS). The planning and use of federal transportation funds is coordinated through the O'ahu Metropolitan Planning Organization (OMPO), a joint City-State agency.

The O'ahu Regional Transportation Plan 2030 (April 2006)<sup>16</sup> indicated that the morning peak-hour traffic volume in the North Shore corridor is at an acceptable level and will continue to be at an acceptable level in the year 2030. However, North Shore residents regularly experience "bottleneck" traffic congestion at Waimea, and near Laniākea on weekend days and during periods of high surf. While congestion along Kamehameha Highway has been historically limited to the winter months when spectators travel slowly through the area to observe the high surf, traffic delays in the vicinity of Hale'iwa Town and Laniākea Beach have become frequent throughout the year. In addition, segments of Kamehameha Highway along the North Shore are sometimes closed during periods of high surf and flooding when roads are hazardous to travelers, or as a result of rock slides.

With traffic delays increasing in frequency, the community is concerned that traffic conditions along Kamehameha Highway are reaching a critical stage, especially when considering that the highway has not been greatly improved since it was first built in the late 1920s<sup>17</sup>. Community concerns include limitations that the existing two-lane highway is unable to accommodate any additional cars, and that the bottlenecks negatively affect emergency vehicle response time. Roadway improvements that correct safety deficiencies, promote alternative modes of transportation, and minimize the number of vehicles on the road are desired. Increasing highway capacity to accommodate more cars is not supported, unless considered necessary for safety reasons. Providing secondary/emergency access bypass routes into and out of the region to facilitate access when Kamehameha Highway is closed is also of significant concern.

Several improvement projects are identified in the FY 2008-2013 State Transportation Improvement Program (STIP) for Kamehameha Highway: (1) Bridge Rehabilitation, Kawaihoa Stream Bridge (Project No. OS51); (2) Rockfall Protection, Waimea Bay (Project No. OS73); (3) Shoreline Protection, Vicinity of Kawaihoa Beach (Project No. OS77); (4) Traffic Improvements, Kahalu'u to Waimea Bay (Project No. OS78); and (5) Wetland Enhancement, Vicinity of 'Uko'a Pond (Project No. OS79)<sup>18</sup>. The STIP is presently being updated. The O'ahu Regional

<sup>16</sup> OMPO's Regional Transportation Plan (ORTP) is currently being updated to the year 2035. OMPO expects completion of the plan in 2011.

<sup>17</sup> C.W. Windstedt was given a contract in 1929 to build Kamehameha Highway from Waimea Bay to Kahuku.

<sup>18</sup> It should be noted that although projects are identified, individually, they may not necessarily be pursued because the actual phase or time frame of a project is not strictly defined and may change for various reasons.

1 Transportation Plan 2030 identifies one proposed State improvement project for future  
2 consideration: Kamehameha Highway Safety Improvements from Hale'iwa to Kahalu'u,  
3 including improvements such as turn lanes, guardrails, signage, crosswalks, etc. No future  
4 highway capacity improvement projects are identified for the North Shore.

5  
6 Other proposed projects for roadway improvements identified by the City DTS include  
7 improvements to Kamehameha Highway, Hale'iwa Road, Waialua Beach Road, Pūpūkea Road,  
8 Alapi'o Road, Kaukonahua Road, and Wilikina Drive.

9  
10 Resolution of the traffic congestion at Laniākea is a high priority for the community, especially  
11 when City and State improvements currently being planned for the area are taken into  
12 consideration. (i.e., The City is planning beach support facilities on the *mauka* side of the  
13 highway, which would encourage more pedestrian crossings and further aggravate the safety  
14 concerns and traffic slowdowns under the current roadway configuration. The State DOT has a  
15 project to rehabilitate the Kawailoa Stream Bridge.) Possible alternatives include either highway  
16 realignment (re-routing the segment of Kamehameha Highway that passes Laniākea Beach  
17 inland) or construction of a new bypass road between Laniākea Beach and Ashley Road. While  
18 a new bypass road would improve traffic flow along the highway, realignment would allow future  
19 beach support facilities to be built on the beach, thereby providing the additional benefits of a  
20 healthier and wider shoreline/beach area and protection for pedestrians. As a result of strong  
21 community support, the State DOT is conducting a planning study for the Laniākea  
22 Realignment/ Bypass Route.

#### 23 24 **4.1.2 Transit (Bus Service) System**

25  
26 Fixed route bus service is provided through the City DTS, which currently contracts with O'ahu  
27 Transit Services (OTS) for operation of TheBus. OTS also operates the Handi-Van system,  
28 which provides transportation service for individuals who are unable to independently use  
29 TheBus due to a disability under the Americans with Disabilities Act.

30  
31 According to the O'ahu Regional Transportation Plan 2030 (April 2006), TheBus system  
32 provides 100 numbered bus routes island-wide with a fleet of 531 buses, including five bus  
33 routes to service the North Shore.

34  
35 In addition to the DTS service, there is a state-operated school bus system that provides both  
36 fixed route and curb service transportation for students of Hale'iwa Elementary, Waialua  
37 Elementary, Sunset Beach Elementary, and Waialua Intermediate and High Schools.

38  
39 There are no plans to extend or expand the number of bus routes on the North Shore. DTS  
40 continues to monitor community needs and ridership, and makes non-cost adjustments to

existing services for the North Shore. The introduction of new service will be contingent on available funding.

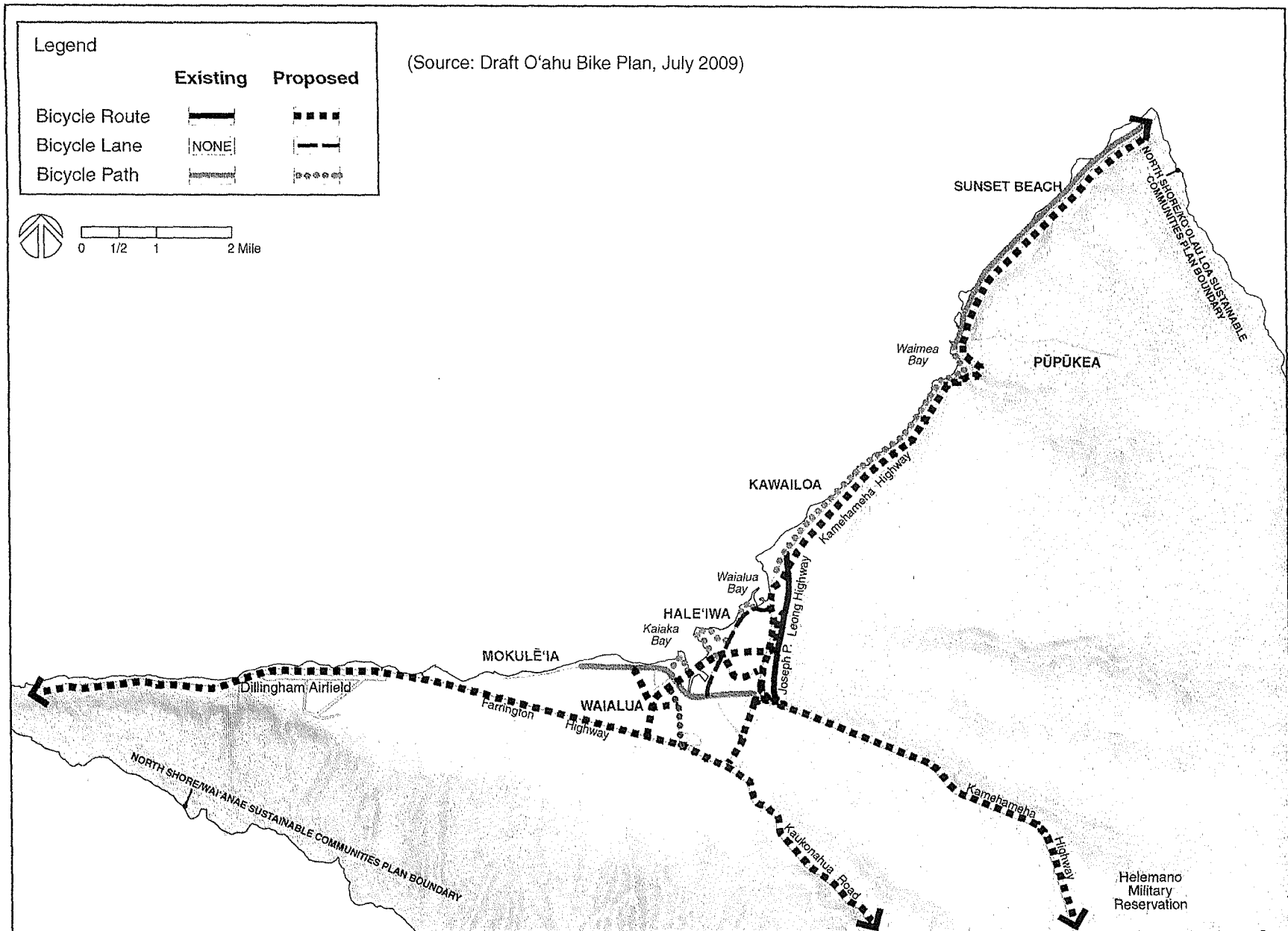
### 4.1.3 Bikeway System

Bike Plan Hawai'i (2003), a State DOT master plan for bikeways, identifies 145.7 miles of existing bikeways on O'ahu, and 258.9 miles of proposed bikeways island-wide to bring O'ahu's total bikeway network to 394.6 miles. The timetable for development will depend upon construction feasibility (including right-of-way acquisition) and funding. Bike Plan Hawai'i defines the various types of bikeways, as follows.

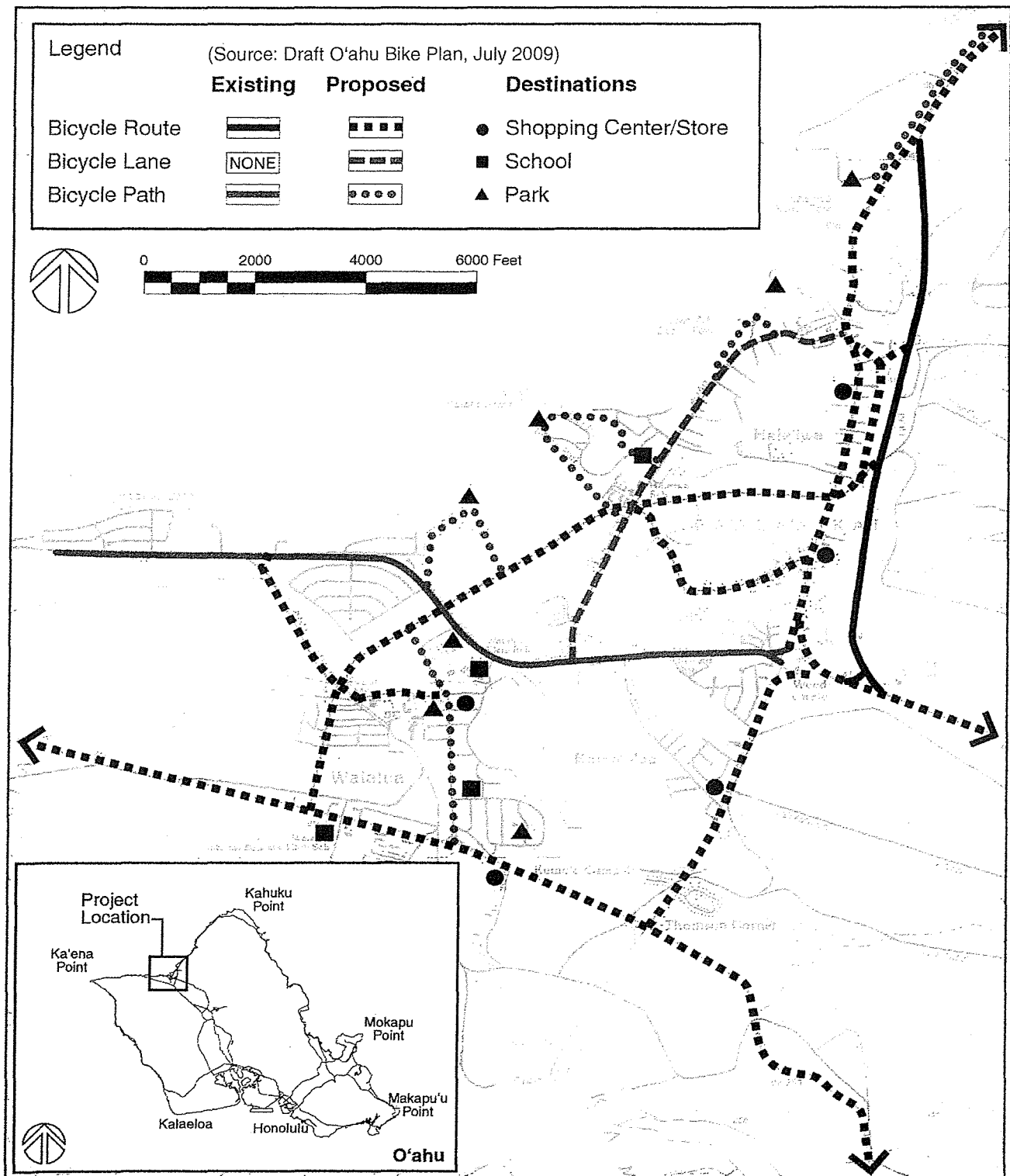
- **Signed Shared Roadway.** Any street or highway specifically designated by signs for the shared use of bicycles and motor vehicles and/or pedestrians. Such facilities are of two types: a widened curb lane in an urban-type area or a paved right shoulder in a rural-type area. The Signed Shared Roadway, according to the Bike Plan Hawaii, is "...the preferred route for bicycle use," when mainly due to land width or other mitigating factors.
- **Bicycle Lane.** A portion of a roadway designated by striping, signing, and/or pavement markings for the preferential or exclusive use of bicycles. The right-of-ways assigned to bicyclists and motorists are delineated to provide for more predictable movements of each. Only crossflows by motor vehicles or pedestrians to gain access to driveways or parking facilities or bus stops are allowed.
- **Shared Use Path.** A bikeway that is physically separated from motorized vehicular traffic by an open space or barrier, and is either within the highway right-of-way or has an independent right-of-way. Often shared with pedestrians, skaters, joggers and other non-motorized users.

The State's bikeway master plan indicates a North Shore bikeway system that includes the existing Ke Ala Pūpūkea Bike Path; a coastline route with links to Central O'ahu, the Ko'olau Loa District, and around Ka'ena Point to Wai'anae; a route through Hale'iwa Town; an existing leg along the Joseph P. Leong Highway (Hale'iwa Bypass Road); and along Hale'iwa Road and Waialua Beach Road. Additional potential bikeways, including one along Pa'ala'a Road in Hale'iwa, and three in Waialua (Pu'uiki Street, Cane Haul Road (Extension), and Kealohanui Street, respectively) are also included in this Sustainable Communities Plan. Existing and proposed bikeways are shown on Exhibits 4.1 and 4.2.





**Exhibit 4.1: North Shore Bikeway System**



**Exhibit 4.2: Waialua - Hale'iwa Pedestrian/Bikeway System**

1 The City DTS is in the process of updating the 1999 Honolulu Bicycle Master Plan. While the  
2 scope of the current plan is limited to Honolulu's urban core between Kahala and Pearl City, the  
3 updated plan will cover the entire island of O'ahu.

#### 4 5 **4.1.4 Other Transportation Facilities**

6  
7 **Airports.** Dillingham Airfield in Mokolē'ia is the only public airport facility located on the North  
8 Shore. The U.S. Army owns the field, but it is used jointly by the U.S. Army and the State of  
9 Hawai'i. The airfield consists of one 5,000-foot-long runway, hangars and tie-downs for smaller  
10 aircraft, facilities for air-taxi services, and storage.

11  
12 The airport services general aviation demands for small aircraft including civilian-powered  
13 flights, sailplane/glider flights, and parachute activities, as well as, military flights. Air traffic is  
14 limited to daytime operations, as a condition of the lease DOT has with the Army, and the  
15 existing airfield can satisfy only a portion of general aviation demands for O'ahu. The State  
16 DOT has indicated that no major expansion is planned for Dillingham Airfield, except for  
17 improvements to existing facilities and construction of additional hangars. General aviation  
18 demands will instead be met by existing airport facilities at Kalaeloa Airport (formerly the  
19 Barbers Point Naval Air Station).

20  
21 **Harbors.** The Hale'iwa Boat Harbor is the only recreational boat harbor facility in the North  
22 Shore region. The facility is managed by the DLNR, Division of Boating and Ocean Recreation.  
23 Policies and guidelines pertaining to Hale'iwa Boat Harbor are included in Section 3.3.

#### 24 25 **4.1.5 Policies**

26  
27 The following are policies for transportation systems on the North Shore.

- 28
- 29 • Retain both Kamehameha Highway and Farrington Highway as two-lane thoroughfares,  
30 to maintain the North Shore's rural character. Provide roadway improvements to  
31 promote pedestrian and vehicular safety and traffic efficiency.
  - 32
  - 33 • Improve mobility and connectivity between residences, jobs, shopping, and recreation  
34 areas on the North Shore.
  - 35
  - 36 • Ensure safe and efficient access to adjacent areas, especially to Central O'ahu.
  - 37
  - 38 • Support a multi-modal transportation system to reduce automobile dependency. Provide  
39 more opportunities and support facilities for convenient and safe alternative modes of

1 transportation, including bus, pedestrian and bicycle travel, and other modes of personal  
2 transportation.

- 3
- 4 • Ensure that existing regional roadways are adequate to accommodate proposed  
5 development proposals, prior to the construction of such developments.  
6

#### 7 **4.1.6 Guidelines**

8  
9 The following guidelines relate to transportation systems for the North Shore.  
10

- 11 • Establish rural streetscape design and development standards within residential areas  
12 consistent with the rural character of the region. Allow for rural elements that reduce the  
13 amount of impervious surfaces, such as minimum pavement widths to support traffic  
14 demands and emergency vehicle access, shared driveways, reduced parking  
15 requirements, more landscaping, and grassed swales as an alternative to sidewalks with  
16 curbs and gutters.  
17
- 18 • Emphasize accessibility from residential streets to bus routes, parks, schools and  
19 commercial centers. Design roadways to facilitate the use of alternative transportation  
20 forms, including bicycle and pedestrian travel, and personal motorized devices.  
21
- 22 • Provide scenic lookout points to minimize hazards created by slower sightseeing traffic  
23 and to enhance the appreciation of the region's scenic resources.  
24
- 25 • Provide appropriately sited and designed off-street parking areas at popular beach parks  
26 wherever feasible, including parking in support parks *mauka* of the highway.  
27
- 28 • Study the safety and feasibility of developing passing zones on Kamehameha Highway  
29 and Kaukonahua Road from Hale'iwa/Waialua to Wahiawā to reduce traffic delays due  
30 to slower moving vehicles, and to improve safety conditions.  
31
- 32 • Provide safety improvements along Kaukonahua Road and Kamehameha Highway from  
33 the Joseph P. Leong Highway (Hale'iwa Bypass Road) to Wahiawā and beyond.  
34
- 35 • Promote the development of emergency runaway vehicle ramps on Kamehameha  
36 Highway and Kaukonahua Road, from Wahiawā to Hale'iwa/Waialua.  
37
- 38 • Approve new residential and commercial development only if the State DOT and the City  
39 DTS confirm that adequate transportation access can be provided.  
40

- 1 • Continue to include the daily visitor population that visits the North Shore in determining  
2 allocations of resources and facilities for the North Shore.  
3
- 4 • Promote the use of transportation demand management strategies, including measures  
5 such as ride-sharing (car/van pooling), improved bus service and routes, the use of non-  
6 vehicular travel modes, modified work hours and teleworking to reduce commutes.  
7
- 8 • Protect the natural resources of Ka'ena Point from potentially damaging vehicular traffic.  
9 Prohibit construction of a roadway around Ka'ena Point.  
10
- 11 • Provide pedestrian-friendly walkways, off-street parking, bus pull-outs, tour bus  
12 maneuvering areas, and drainage improvements in Hale'iwa Town.  
13
- 14 • Improve the main roadways within Hale'iwa and Waialua Country Town Districts with  
15 shade trees, landscaping, sidewalks, street furniture, and signage to promote pedestrian  
16 orientation within these country towns.  
17
- 18 • Create a regional pedestrian/bikeway system linking the parks, schools and town  
19 centers in Hale'iwa and Waialua with outlying communities, as shown in Exhibits 4.1 and  
20 4.2.  
21
- 22 • Coordinate bikeway development with responsible State and City agencies and private  
23 landowners to ensure that safety, liability, and a mixture of use issues are adequately  
24 addressed.  
25
- 26 • Locate bus stops to be convenient and accessible to residential areas and hubs of  
27 community activity.  
28
- 29 • Design bus shelters to provide weather protection for bus passengers and complement  
30 the natural setting.  
31
- 32 • Explore the possibility of a Historic Hale'iwa Trolley as an alternative for visitors to  
33 experience the North Shore.  
34
- 35 • Encourage the State to upgrade, maintain, and expand the boating facilities at Hale'iwa  
36 Harbor to meet the needs of recreational and commercial fishing and leisure boating  
37 activities.  
38

- Maintain small aircraft, general aviation and other recreational, commercial, or other military uses at Dillingham Airfield in cooperation with the U.S. Army. As necessary, upgrade and maintain facilities to support airfield use.
- Limit uses in the vicinity of Dillingham Airfield to those that are compatible with aircraft noise levels and overflights from the airfield.
- Identify and maintain former cane haul roads and other *mauka* roads to provide for the safe and quick evacuation of residents and the movement of emergency response personnel (e.g., fire, police, ambulance) in the event that the primary highways become impassable due to natural disasters or other emergency incidents. Investigate the use of the following for safety and emergency access: the cane haul road system *mauka* of Farrington Highway in Mokulēʻia; the roads connecting with Drum Road including cane haul road (Twin Bridge Road) in Haleʻiwa, Kawailoa Road, Ashley Road, Pūpūkea Road and Motocross/Kaunala Road. COMSAT/Girl Scout Camp (Paumalū) Road does not connect with Drum Road and would be for evacuation use only.

## 4.2 WATER SYSTEMS

Groundwater, which is water found beneath the earth's surface, is one of Hawai'i's most important natural resources. Used for agricultural, industrial, and domestic purposes, groundwater is the principal source of O'ahu's municipal water supply. Statewide, groundwater provides about 99 percent of Hawai'i's domestic water and about 50 percent of all the freshwater used in the State.<sup>19</sup> Consequently, protecting the quality and quantity of groundwater resources is essential to Hawai'i's future well-being.

In 1987, the State enacted the Water Code (HRS Chapter 174-C) in order to protect, control, and regulate the use of the State's water resources for the benefit of its people. Under the Code, the City is responsible for preparing the water use and development plan for the City and County of Honolulu.

This plan, called the Oahu Water Management Plan (OWMP), is prepared by the Department of Planning and Permitting with the assistance of the State Commission on Water Resource Management (CWRM) and the Board of Water Supply, and approved by the City Council following extensive public review and comment. The OWMP was adopted by the CWRM and the City Council in 1990. The most recent revision of the Technical Reference Document for the OWMP (December 1998) includes updated supporting data, analyses, and conclusions, which reflect the closing of Oahu Sugar Company and Waialua Sugar Company and the most recent

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<sup>19</sup> U.S. Geological Survey. "Groundwater in Hawai'i: Fact Sheet 126-00." Prepared by Gingerich, S.B. and Oki, D.S.

data and analytical review. Future revisions to the OWMP shall be submitted to the City Council for its review and approval.

The OWMP is currently being updated using the watershed approach to water resource management to account for watershed protection and water use and development. To improve the integration of land use and water resources, the OWMP has been divided into eight watershed management plans (WMP), which coincide with the eight Development Plan and Sustainable Communities Plan areas. The goal of the WMP for each planning area is to formulate an environmentally holistic, community-based, and economically viable WMP balancing: (1) the preservation and management of O'ahu's watersheds; and (2) sustainable ground and surface water use and development to serve present users and future generations. Each WMP shall be submitted to the City Council for adoption by ordinance.

The Board of Water Supply OWMP overview section of the WMP, 2009, evaluated available water supplies and the water development needs of the existing and new residential and commercial development (including retail, office, resort, recreational, and industrial) likely by 2030 as a result of implementation of the City's Development Plans and Sustainable Communities Plans. There is available water supply to accommodate projected water needs through the 2030 planning horizon. The North Shore Watershed Management Plan will provide guidance for the sustainable management and use of all water resources in the watershed (both surface and ground water resources).

CWRM has adopted sustainable yields to protect groundwater resources and regulate water use by water use permits. The following table summarizes the available water in aquifers underlying the North Shore area.

**Table 4-1**  
**2005 Groundwater Use by Aquifer (mgd)**

Aquifer Sector	Aquifer System	Previous Sustainable Yield (SY)	Revised 2008 Sustainable Yield (SY)	2005 Water Permits Issued	Unallocated Sustainable Yield	Existing Water Use July 2005	SY Minus Pumpage
North	Mokuleia	12	8	8.301	-0.301	0.303	7.697
	Waialua	40	25	30.311	-5.311	3.020	21.980
	Kawailoa	39	29	1.549	27.451	0.682	28.318
Total North		91	62	40.161	21.839	4.005	57.995

Reference: Oahu Water Management Plan: Overview Section 2009

Groundwater resources within the region are comprised of the three distinct aquifer systems that comprise O'ahu's North Aquifer Sector: the Mokulē'ia, Waialua and Kawailoa Aquifer



Systems. This aquifer sector is designated by CWRM as a water management area, and approval of water use permits from CWRM are required to withdraw water from these systems. The Hawai'i Water Plan Water Resources Protection Plan (2008) indicates the sustainable yield of the three aquifer systems in 2005 about 62 million gallons per day (mgd). In 2005, water use permit allocations for the three aquifer systems accounted for about 40 mgd, while water withdrawals were estimated at about 4 mgd. A significant amount of water is allocated to agricultural water use permits that remain unused due to the closure of plantation agriculture.

Based on CWRM's 2005 basal permitted uses of groundwater on O'ahu (estimated at about 295 million mgd, there is approximately 112 mgd of unallocated sustainable yield remaining in the island-wide groundwater supply that could be developed.

The BWS supplies municipal water service to most of the North Shore, with the exception of Mokulē'ia which is served by a private water company. Municipal water demand for the North Shore in 2000 was approximately 2.8 mgd, of which 2.5 mgd were withdrawn from sources within the region and 0.3 mgd were imported from Ko'olau Loa. BWS projections forecast that water demand for the area will increase to about 3.4 mgd by the year 2030.<sup>20</sup> The BWS considers the water supply from existing wells on the North Shore more than adequate to meet current and future demand in the region. Agricultural irrigation demand for nonpotable water for the 20,000 acres of prime agricultural land on the North Shore is estimated at 35.8 mgd.

The following tables indicate potential potable and nonpotable sources of water to meet future demands in the North Shore area. BWS is proposing the increase of permitted use for the existing Waialua Wells potable water source in the Waialua aquifer of the North Shore area. This increased withdrawal from an existing source will be pursued as part of the BWS's development and operation of an integrated island-wide water system.

**Table 4-2**  
**Potential Groundwater Sources of Potable Water for the North Shore**

Ground Water Source	Current Permitted Use (mgd)	Additional Permitted Use Requested (mgd)	Total Permitted Use Requested (mgd)	CWRM Aquifer System Area
Waialua Wells	1.73	0.27	2.00*	Waialua

\*Pending CWRM approval of BWS Water Use Permit Increase Application January 26, 2010

<sup>20</sup> City and County of Honolulu Board of Water Supply. O'ahu Water Management Plan Overview.

**Table 4-3**  
**Potential Alternative Nonpotable Water for the North Shore**

Resource	Minimum Estimate (mgd)	Maximum Estimate (mgd)	SCP Area Served
Wahiawa Reservoir	8.5	22.0	North Shore Central O'ahu
Recycled Water: Army, City, Wahiawa WWTP	2	4	North Shore Central O'ahu
Kawailoa Irrigation System (Data coming from Kamehameha Schools)	-	-	North Shore

Kaukonahua Stream minimum average month = 8.5 mgd; 2002 annual average = 22 mgd. Wahiawa Reservoir storage capacity = 9,200 acre-feet or 3.066 mg

The CWRM has authority in all matters regarding administration of the State Water Code. By City Charter, the BWS has the authority to manage, control and operate the water systems of the City, and therefore should coordinate the development and allocation of potable and nonpotable water sources and systems intended for municipal use on O'ahu as guided by the City's land use plans and the OWMP.

The BWS Six-year Capital Improvement Program (CIP) for FY2010-FY2015 contains several projects for the North Shore, including a proposed 16-inch main along Kamehameha Highway from Pūpūkea to Waiale'e, and three other projects to replace aging waterlines. The existing private water transmission system serving Mokuē'ia was built in the 1930s, and is in need of replacement/upgrades to address water contamination issues and meet current fire protection standards. BWS has indicated that the private owner would need to upgrade the system to meet current standards before the BWS could consider acquiring the system. Consideration has also been given for BWS to provide a water service connection with the system remaining private.

#### **4.2.1 Policies**

The following policies seek to maintain an adequate supply of good quality water, retain sufficient acreage in watersheds to insure infiltration into groundwater aquifers, and strengthen the protection of water sources and watersheds.

- Protect and preserve the region's water resources, including groundwater, streams, wetland areas, natural drainage systems, watershed areas and the shoreline and coastal areas. Ensure that the high quality of the region's nearshore and coastal waters is

maintained to benefit recreation, the economy, the region's natural biological systems, and future generations.

- Protect and manage the water resources that support wetland farming (taro and lotus root) and diversified agriculture to ensure sufficient quantity and quality.
- Integrate management of all potable and nonpotable water sources, including groundwater, surface water, storm water, and reclaimed water following City development of plans and adoption of appropriate management processes in accordance with City and State mandates.
- The BWS will either indicate that adequate potable and nonpotable water is available, deny, or will require/recommend conditions that should be included as part of any application for zone changes, master plans, subdivisions, and building permit approvals for a new residential or commercial development on the North Shore, in order to assure water service adequacy, dependability and efficiency.
- All developments are required to conserve water supplies by implementing water efficiency and conservation measures, such as monitoring water use and water loss, fixing leaks, installing low flow plumbing fixtures, drought tolerant landscaping, sub-metering, and soil moisture sensors in irrigation systems.
- Rain catchments connected to roof gutters should be promoted in the North Shore for landscape irrigation to supplement municipal water supplies. Rain catchments also reduce stormwater runoff into streams and nearshore waters.
- An adequate supply of nonpotable water should be developed and required for irrigation of large landscaped areas and other suitable uses on the North Shore, if available, in order to conserve the natural water supplies of potable water for future generations.
- A sufficient amount of water should be allocated to meet the diversified agricultural needs for the North Shore for the long-term support of a viable agricultural industry. The agricultural industry's water needs are uncertain and substantial, yet important, to support O'ahu's growing population by providing locally and organically grown produce, Asian-based specialty crops, niche and off-season fruits and vegetables for export, and bio-fuels for renewable energy systems. Future water demand depends on the types of crops cultivated, the climate and the number of acres in cultivation.

- Source water protection best management practices should be required of all agricultural activities to minimize the transport of pesticides, herbicides, and fertilizers into the underlying potable aquifers and into streams and nearshore waters.

#### 4.2.2 Guidelines

- Confirm that adequate potable and nonpotable water is available before approving new residential or commercial development.
- Ensure that State and private well development projects are integrated into and consistent with City water source development plans.
- Support infrastructure improvements that provide for the efficient and secure transmission and delivery of quality water.
- Conserve the use of potable water by implementing the following measures, as feasible and appropriate:
  - Low-flush toilets, flow constrictors, rainwater catchment, and other water conserving devices in commercial and residential developments
  - Indigenous, drought-tolerant plant material and drip irrigation systems in landscaped areas
  - Use of reclaimed water for the irrigation of agricultural lands, parks, golf courses and other landscaped areas where this would not adversely affect potable groundwater supply or pose possible health and safety risks.

### 4.3 WASTEWATER TREATMENT

The majority of the homes in the North Shore area are served by individual cesspools and septic tanks/leachfield systems. The Pa‘ala‘a Kai Wastewater Treatment Plant (WWTP), a municipal facility in Waialua, was constructed in 1980 to serve 314 homes in the Pa‘ala‘a Kai subdivision. Effluent from the facility is discharged into injection wells. There are also 31 private treatment plants serving various apartment complexes with effluent disposal into injection wells. Of the 31 private WWTPs operating in 2008, 19 are located in Waialua, six are in Hale‘iwa, and six are in the Sunset Beach/Pūpūkea area. Privately operated injection wells are a convenient, long-term disposal alternative to the lack of a municipal sewage collection and disposal system. However, the nature of injection wells and the common lack of land space for replacement injection wells make them a costly and often unreliable method of discharge.

Research has indicated that approximately 40 percent of the cesspools in the Waialua-Hale‘iwa area have failed and require pumping on a frequent basis. Even when working properly,

cesspools remove only a small percentage of the pollutants contained in domestic sewage, with groundwater carrying the remainder into the ocean. As a result, cesspools are considered a potential health problem for recreational users of shoreline waters in this area.

An older wastewater plan for the North Shore<sup>21</sup> recommended that a centralized subregional wastewater treatment system (collection and conveyance system, treatment plant, and effluent disposal by means of irrigation and rapid infiltration) be constructed to serve Waialua, Hale'iwa and a portion of Kawaihoa. While there are currently no funds or community consensus in support of a centralized system, the City is committed to working with the community to develop, implement, or facilitate appropriate, effective, and environmentally sound wastewater treatment systems that will not impact groundwater and ocean resources. An ocean outfall in the North Shore area has been rejected by the community as an option due to environmental and economic considerations. The City is currently in the process of preparing the North Shore Regional Wastewater Alternatives Plan to evaluate various alternatives for providing small regional wastewater treatment and disposal solutions for the North Shore region.

The Pūpūkea-Sunset Beach area is not currently part of the City's Waialua-Hale'iwa Wastewater Service Basin, but should be included in future wastewater treatment plans in order to protect the critical ocean environment in the area. Over the last few years, the State Department of Health (DOH) has been slowly requiring upgrades for individual cesspools to individual wastewater treatment systems in an effort to eventually eliminate all cesspools. All wastewater plans must conform to applicable provisions of the DOH's Administrative Rules, Chapter 11-62, "Wastewater Systems".

#### **4.3.1 Policies**

The following policies apply to wastewater treatment systems on the North Shore.

- Provide adequate public and private wastewater treatment facilities and improve the existing wastewater management services on the North Shore to protect the North Shore's water resources and the health of the community is the highest priority.
- Support alternative wastewater technologies that reflect the community's values and rural character.

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<sup>21</sup> City and County of Honolulu. Final Environmental Impact Statement for Supplemental Waialua-Hale'iwa Wastewater Facility Plan. 1996.

### 4.3.2 Guidelines

- Use reclaimed water for irrigation and other uses, where feasible, in accordance with the Guidelines for the Treatment and Use of Recycled Water (May 15, 2002) by the State Department of Health and the No Pass Line established by the Board of Water Supply. A “wetlands” treatment system could serve as wild bird refuges that could also be used as a picnicking area and/or children’s fishing park.
- Replace outdated individual cesspools with septic tanks and individual wastewater systems. Consider public programs or policies to support private conversion efforts.
- Discourage new residential, commercial or school uses in close proximity to wastewater treatment facilities where odors may be objectionable.
- Identify appropriate areas and technologies for future wastewater facilities that maintain the rural character and are proportionate to future population projections.
- Do not permit an ocean outfall for treated wastewater effluent in the North Shore area.

### 4.4 ELECTRICAL SYSTEMS

Power to the North Shore is provided by Hawaiian Electric Company, and distributed throughout the community through a system of subtransmission and distribution lines, as well as distribution substations.

Hawaiian Electric is committed to increasing its renewable energy portfolio, and is engaged in a broad spectrum of renewable energy-related initiatives and activities occurring on the North Shore, including:

**Solar Water Heating.** Hawaiian Electric’s solar water heating program encourages households statewide to install rooftop solar water heating systems.

**Biofuels.** Hawaiian Electric provides research funding for biofuels crop research, such as the evaluation of promising oil crops.

**Photovoltaics.** The number of photovoltaic systems installed under net energy metering increased significantly in 2007, and is expected to increase into the future. Through the Sun Power for Schools program, Hawaiian Electric partners with the State Department of Education to install photovoltaic systems at Hawai’i public schools. Waialua High School has been a past participant in the Sun Power program.

1  
2 In addition, private developers are in the process of implementing projects that use the region's  
3 wind resources to generate electricity.  
4

5 Communications for Hawaiian Electric have become an increasingly important and integral part  
6 of the island's energy delivery system. Fiber optics, mobile radio, microwave radio, packet  
7 radio, and multiple address system UHF radio links improve operations, control, and service of  
8 the utility's electrical system. As the energy system grows and as future applications materialize  
9 in the areas of metering and customer communication, supervisory control and data acquisition,  
10 and mobile communications, the need to control, service, and monitor the facilities to ensure  
11 system reliability and emergency communications capability becomes greater. Hawaiian  
12 Electric has proposed plans to improve the mobile radio coverage with the addition of new  
13 telecommunication sites and upgrades at existing sites throughout O'ahu including  
14 communications sites in the North Shore area. The utility's long-range plan is to further improve  
15 mobile radio communications, with the adaption of mobile data, and completion of a microwave  
16 radio communications loop system around the island.  
17

18 Additional policies and guidelines pertaining to electrical systems are included in Section 3.1.3.7  
19 Scenic Resources and Scenic Views and Section 3.1.3.8 Utility Corridors and Greenways.  
20

#### 21 **4.4.1 Policies**

- 22
- 23 • Provide adequate and reliable electrical service.
- 24
- 25 • Locate and design system elements such as electrical power facilities, substations,
- 26 communication sites, and transmission lines to avoid or mitigate any potential adverse
- 27 impacts on scenic and natural resources.
- 28
- 29 • Locate powerlines underground.
- 30
- 31 • Promote the use of renewable energy sources and energy conservation measures.
- 32

#### 33 **4.5 SOLID WASTE HANDLING AND DISPOSAL**

34

35 Solid waste collection and disposal systems on the North Shore consist of a City and County-  
36 operated solid waste transfer facility at Kawaihoa. Household refuse collection services are  
37 provided by the City and County and private haulers. Municipal wastes are primarily processed  
38 at the H-POWER facility or recycled. The Kawaihoa Refuse Transfer Station is located on  
39 Kawaihoa Drive, and is an intermediate disposal site which accepts trash from City collection



1 vehicles, some private haulers, and small businesses. It also serves as a convenience center  
2 for residents to dispose of their household solid waste.

3  
4 Refuse generated by non-household sources is collected by private haulers and delivered to the  
5 H-POWER facility. There is only one active landfill for O'ahu (Waimānalo Gulch) in the 'Ewa  
6 area which accepts primarily noncombustible wastes. The Waimānalo Gulch landfill is  
7 operating on a temporary permit extension, and the City is moving ahead with plans to expand  
8 the existing site. The City has instituted recycling and other waste diversion programs in an  
9 effort to expand the useful life of this landfill.

10  
11 The City's Solid Waste Integrated Management Plan (November 2004) outlines a  
12 comprehensive, unified approach to such vital issues as landfill and disposal facility siting,  
13 expansion of existing services and facilities, specialized waste disposal (e.g., batteries, tires,  
14 sewage sludge, medical and hazardous wastes), waste reduction, and recycling strategies.  
15 There are no plans to create additional convenience center, transfer station, or landfill  
16 operations on the North Shore.

17  
18 As waste management and technological innovations occur, the North Shore can and should  
19 play a part in the City's long-term efforts to establish more efficient waste diversion and  
20 collection systems. However, since the region is not expected to contribute significantly to  
21 future increases in O'ahu's solid waste management demands and does not contain sites  
22 suitable for the processing or disposal of solid waste on an island-wide scale, it would be  
23 inappropriate to consider any future landfills on the North Shore.

24  
25 Littering and illegal dumping on agricultural lands and vacant lots is a chronic problem in parts  
26 of the North Shore region. In addition, there is a shortage of regular maintenance crews to pick  
27 up all the trash left on public beaches, parks, and highways.

#### 28 29 **4.5.1 Policies**

30  
31 The following policies apply to solid waste handling and disposal in the North Shore:

- 32  
33 • Provide adequate resources for trash removal, cleanup of illegal dumps, and  
34 enforcement of antidumping laws.
- 35  
36 • Promote recycling and other source reduction programs dedicated to minimizing the  
37 amount of solid waste generated.

## 4.5.2 Guidelines

- Expand recycling collection facilities and services, and public outreach and education programs that promote responsible waste management and source reduction.
- Encourage recycling of regional green waste by establishing green waste facilities in an appropriate location, possibly integrated with, or adjacent to the Kawaihoa Refuse Transfer Station.
- Expand the use of automated refuse collection in residential areas.
- Monitor and regulate illegal dumping and littering activities.

## 4.6 DRAINAGE SYSTEMS

Flooding is a recurring natural hazard for the North Shore's coastal areas due to the region's natural topography and the inadequate capacity of existing drainageways. All coastal areas in the North Shore region are prone to flooding because of heavy *mauka* stream flows, high waves, and tsunami activity. However, the low-lying areas surrounding Kaiaka Bay and Waialua Bay are the most vulnerable to flooding, due to the watershed's large size and the number of streams and gulches that converge at the shoreline in this area (including Ki'iki'i Stream, Paukauila Stream and the Anahulu River). Modifications to natural drainage patterns and activities that increase storm runoff from the *mauka* areas – including stream channelization, increased erosion and sedimentation, debris buildup/blockage to restrict stream flow – further compound flood hazards in this area.

Recently completed or ongoing drainage system studies to address the community's concerns about flooding in the Waialua-Hale'iwa area include: (1) Hale'iwa Road Drainage Improvements Engineering Study; (2) Kaukonahua Stream Dredging Study (from Otake Camp to Kaiaka Bay); and (3) Kaiaka Bay Watershed Demonstration Project. In addition, the community supports a comprehensive study of the Waialua-Kaiaka Bay watershed to address regional drainage and flooding issues and coastal water quality.

Open and undeveloped lands generally benefit surface and storm water management systems by providing large areas of highly infiltrative surfaces which support the natural absorption of water. In general, existing storm water systems do not meet current City drainage standards.

#### 4.6.1 Policies

- Improve drainage systems in the region to provide adequate protection from flooding and protect the quality of nearshore waters.
- Encourage coordination between public agencies and private landowners to identify needed drainage improvements and develop a phased plan for improvements.
- To the extent possible, integrate planned improvements to the drainage system into the regional open space network.
- Maintain the waters of Waialua Bay, which is designated by the State Department of Health as Class AA waters, in as natural and pristine state as possible.
- Administer and enforce zoning controls to restrict future development within identified floodway, flood fringe, coastal high hazard, tsunami inundation areas, and general flood plain districts.
- Require property owners to elevate existing structures above the regulatory flood elevation or relocate to sites beyond floodprone areas.

#### 4.6.2 Guidelines

- Require all structural and land improvements to provide adequate drainage and flood mitigation measures to reduce storm runoff and flood hazard.
- Employ retention and detention methods that allow for the gradual release of stormwater. Where feasible, use open spaces, including parking lots, landscaped areas, and parks, to detain or allow ground infiltration of storm water flows to reduce their volume, runoff rates, and the amounts of sediment and pollutants transported.
- Use detention/retention basins as passive recreational areas and to provide recreational access for pedestrians and bicyclists.
- Retain natural gulches as flood plains and open space resources. Restrict development within gulches, and prohibit grading or other disturbance of gulch walls.
- Emphasize control and minimization of nonpoint source pollution in drainage system design. Where hardening of stream channels is unavoidable, improvements should protect habitat, maintain rural character and aesthetic quality, and avoid degradation of

1 coastline and of stream and nearshore water quality, consistent with guidelines stated in  
2 Section 3.1.2.4.

- 3
- 4 • Design drainageways to control 100-year floods. Any future work performed within the
- 5 100-year floodplain shall adhere to the requirements of the Federal Emergency
- 6 Management Agency (FEMA) and meet all flood-proofing requirements.
- 7
- 8 • Regularly maintain and clean drainageways and flood mitigation structures of debris to
- 9 ensure that they achieve the purpose for which they were designed.
- 10
- 11 • Employ best management practices to minimize runoff from existing conservation and
- 12 agricultural land uses, and other areas that may generate sediment and debris.
- 13
- 14 • Repair and maintain related agricultural irrigations systems and infrastructure.
- 15
- 16 • Develop a drainage master plan for the Waialua watershed to address erosion and flood
- 17 protection concerns.
- 18
- 19 • Conduct public outreach and education programs that explain the potential for flooding
- 20 and efforts to minimize the effects of flooding.
- 21

## 22 **4.7 SCHOOL FACILITIES**

23

24 Primary (K-6) and secondary (7-12) educational opportunities on the North Shore are provided

25 by the Department of Education (DOE) and individual private schools. At present, there are four

26 public schools in the North Shore Sustainable Communities Plan area: three primary (K-6)

27 schools and one combined intermediate (7-8) and high (9-12) school. Private schools in the

28 region include St. Michael's School (Preschool-8), Sunset Beach Christian School (K-8), and the

29 proposed Aloha Ke Akua High School. The 2007-2008 enrollment and capacity, and 2013-2014

30 projected enrollment for the DOE schools are shown in Table 4-4.

31

**Table 4-4**  
**Public School Enrollment and Capacity, North Shore**

School	2007-2008 Enrollment	2007-2008 Capacity	2013-2014 Projected Enrollment
<b>Elementary</b>			
Hale'iwa Elementary	167	566	140
Sunset Beach Elementary	387	466	381
Waialua Elementary	521	580	529
<b>Intermediate and High School</b>			
Waialua High and Intermediate	649	1040	569

SOURCE: DOE Facilities Development Branch, August 2007.

DOE enrollment projections are utilized for facilities and program planning. The projections for individual schools reflect current migration patterns within the school service area. Adjustments are made in the school service area for new housing developments, birth statistics, changes in service boundaries, changes in school organization, and attendance of students from outside the school service area by district exception. Recent enrollment figures show that all the DOE schools are operating near or below capacity. Waialua Elementary is operating near capacity, while other schools may have more space to accommodate additional students from outside the school's service boundary. Future residential developments in the area will have an impact on the area schools, although there are currently no major projects planned or under construction.

The DOE currently does not project any new schools for the North Shore. Temporary classrooms may be used to handle future enrollment increases at the various schools. In many communities where meeting spaces, recreation facilities and social halls are limited (the North Shore included), public schools often supplement their primary role for classroom education, and assume important secondary functions as cultural and recreational centers during nonschool hours. School cafeterias are used as meeting facilities for community groups and organizations, youth groups and health and fitness classes. School playing fields and playgrounds are used for youth sports programs and are often gathering places for families with young children. Some schools also serve as the community's primary emergency shelter during emergency events or disaster situations. Recognizing the multipurpose role of public schools as community gathering places, the City prefers that school facilities be designed and operated as community centers with shared recreation, athletic and meeting facilities.

Although existing DOE policies allow school principals to permit outside use of school facilities during nonschool hours and weekends, financial limitations have affected the DOE's ability to design facilities as community centers. In addition, DOE has experienced operational problems where schools and parks are colocated. School programs require separate spaces to assure student safety and adequate space for physical education and athletic activities, making it impractical to allow community use of the facilities during school hours. DOE programs are given priority, and the sharing of facilities is only accommodated when the outside programs do not adversely affect student education. Nevertheless, a long-term goal should be to have school facilities appropriately designed to take advantage of opportunities to serve different functions.

#### **4.7.1 Policies**

Policies for school facilities are as follows:

- Provide and maintain quality school facilities that serve the needs of the community.
- Integrate school facilities with other community uses.

#### **4.7.2 Guidelines**

The following guidelines should be followed in planning and operating public schools in the North Shore:

- Confirm the adequacy of school facilities before approving new residential development. Approve new residential developments only after the State Department of Education confirms that adequate school facilities, either at existing schools or at new school sites, will be available at the time new residential units are occupied.
- Design DOE schools as community centers to facilitate community use after school hours.
- Colocate elementary and intermediate schools with parks, and coordinate facility design with the State DOE and the City DPR whenever possible to avoid duplication of parking and athletic, recreation, and meeting facilities.
- Coordinate the development and shared use of athletic facilities such as swimming pools, gymnasiums, and playfields and courts with the DOE where the joint use of such

1 facilities would maximize use and reduce duplication of function without compromising  
2 the schools' athletic programs.

- 3
- 4 • Promote facility design and construction that allows for school buildings to be used as  
5 public hurricane shelters.
- 6
- 7 • Support the DOE's request for school impact fees from developers of residential projects  
8 to ensure that adequate school facilities are in place at the time new residential units are  
9 occupied.
- 10

#### 11 **4.8 PUBLIC SAFETY FACILITIES**

12

13 **Police Protection.** The North Shore Sustainable Communities Plan area is considered part of  
14 the Honolulu Police Department's (HPD) District 2. District 2, which includes Wahiawā, is  
15 divided into 13 patrol beats. Beats are defined areas patrolled by one or more officers during  
16 the course of a work shift with definitions based on geographic area, type of population, and  
17 calls for police service. Approximately 5 or 6 officers are needed to staff one beat on a 24-hour  
18 basis. Currently, there are four police beats covering the North Shore. The HPD has estimated  
19 that an additional two beats will be needed to serve the North Shore over the next 20 years.

20

21 Police service for the Helemano Military Reservation is provided by federal authority, and has  
22 little effect on HPD operations.

23

24 **Fire Protection.** The Honolulu Fire Department operates fire stations at Sunset Beach and  
25 Waialua-Hale'iwa. The Fire Department's long-range goals and objectives for the North Shore  
26 include: (1) relocation of the Waialua Fire Station out of an established flood and tsunami  
27 inundation zone; (2) facility expansion to operate as a regional fire station providing emergency  
28 fire and medical services and logistical supply support in times of emergency situations where  
29 supply lines are cut off; (3) installation and activation of a new water tanker to assist in areas  
30 where water sources are limited or nonexistent; and (4) improvements to the Anahulu Bridge to  
31 accommodate the increasing weights of HFD equipment. The Fire Department continues to  
32 monitor development trends and service needs to determine the requirement for new fire  
33 stations. HFD is currently considering the long-term potential for new stations at Kawaihoa and  
34 Kawela. Land acquisition for any future stations will be dependent upon development  
35 timetables.

36

37 **Ocean Safety.** The Emergency Services Department, Ocean Safety and Lifeguard Services  
38 Division provides lifeguard services for the following ocean safety towers on the North Shore:  
39 Sunset Beach, 'Ehukai, Ke Waena, Waimea Bay, and Hale'iwa Ali'i Beach. There is an

1 increasing demand to establish permanent lifeguard services at Laniākea, Chun's Reef and  
2 Velzyland.

3  
4 There are approximately 30 water safety officers assigned to the North Shore. In addition to  
5 personnel at lifeguard towers, they conduct daily patrols from rescue crafts and also patrol from  
6 Waimea Bay to Sunset Beach on all-terrain vehicles. The number of water safety officers within  
7 the district will fluctuate seasonally, with more officers assigned to the area during the high surf  
8 season in the winter and less during the summer months. It is noted by Ocean Safety officials  
9 that rescue craft patrols will play a larger role in extending lifeguard services in response to new  
10 or expanded beach parks in the region.

11  
12 **Civil Defense.** The Civil Defense system for the City and County of Honolulu is the  
13 responsibility of the Department of Emergency Management (DEM). The DEM is responsible  
14 for monitoring, warning, evacuating and securing (if necessary) the vulnerable areas of the  
15 entire North Shore.

16  
17 The North Shore is susceptible to natural hazards such as tsunami, tropical storms, high surf  
18 and hurricanes. In the event of these hazardous conditions, residents need to evacuate to  
19 shelter facilities. There are two public hurricane shelter facilities for the North Shore  
20 Sustainable Communities Plan area -- Waialua High and Intermediate School and Sunset  
21 Beach Elementary School. In addition, Waialua Recreation Center is used for high surf, flood  
22 and other required evacuations. The Outdoor Warning Siren system for the North Shore area  
23 was completely upgraded in 2007.

24  
25 Flooding is the most common and recurring hazard. Under heavy, continuous rain and flooding  
26 conditions, DEM plans are in place to evacuate large portions of Hale'iwa and Waialua, if  
27 required, and include additional evacuation options in the event Wilson Dam were to fail.

28  
29 According to DEM, planning for the area must include preparedness education and the  
30 provision of adequate warning devices, designation of adequate transportation routes for  
31 evacuee movement, and suitable shelters where evacuees can seek refuge. The DEM  
32 recommends that any new public buildings such as schools and recreation centers be required  
33 to consider emergency shelter capabilities as a secondary use of the building.

#### 34 35 **4.8.1 Policies**

36  
37 Policies for all public safety facilities are as follows:  
38



- Promote an integrated approach to public safety on the North Shore, which will enable police, fire, ocean safety, civil defense, and emergency medical efforts to share resources and information, as appropriate.
- Encourage the development of safe, crime-deterrent public and private environments.
- Provide adequate staffing and facilities to ensure effective and efficient delivery of basic government service and protection of public safety.

#### **4.8.2 Guidelines**

- Include visitor demands and needs when allocating public safety resources.
- Sponsor public education programs to increase awareness about public safety issues.
- Identify, improve and service transportation networks (via signage, traffic control personnel and equipment) to ensure efficient evacuee movement.
- Support highway improvements that would reduce emergency vehicle response times and facilitate emergency personnel movement through traffic.
- Expand lifeguard services at beaches with high visitor demands, such as Laniākea, Chun's Reef, and Velzyland.
- Confirm the availability of adequate police and fire protection before approving new development.
- Increase police presence, including car and bicycle patrols and community policing efforts, especially in high-theft areas such as beach parks. Support the availability of adequate staffing and funding to enable this.
- Establish facilities which police officers could use as a local base of operations.
- Support the physical improvements and infrastructure upgrades needed to ensure adequate fire protection.
- Use crime-preventive principles in the planning and design of communities, open spaces, circulation networks, and buildings.

- Design new public buildings such as schools and recreation centers to serve a secondary function as an emergency shelter.

## 4.9 OTHER COMMUNITY FACILITIES

Antennae have been around as long as we have had radio and television services. Antennae associated with communication purposes have grown tremendously since the introduction of mobile communication devices in the early 1980s. While the telecommunication industry has provided more convenient communication capabilities for individuals, it has also increased public agencies' ability to provide faster and more efficient response to those in need, particularly during times of emergency.

While the benefits of the telecommunications industry cannot be disputed, communities have opposed new antennae due to aesthetic impacts, especially related to public views and neighborhood character. Their visibility has increased, particularly where antennae are mounted on freestanding towers.

The public has also raised concerns about the environmental effects of electromagnetic field exposure associated with radio transmission, as evidenced by the presence of antennae. However, the Federal Communications Commission (FCC) is responsible for evaluating the human environmental effects of radio frequency emissions, assuming that the provider is in compliance with the Commission's radio frequency rules.

### 4.9.1 Policies

The following are policies governing the utilization of antennae

- Encourage colocation of antennae; towers should host the facilities of more than one service provider to minimize their proliferation and reduce visual impacts.
- Mount antennae onto existing buildings or structures so that public scenic views and open spaces will not be negatively affected. However, except for the occupant's personal use, antennae on single-family dwelling roofs in residential districts are not appropriate.
- Use "stealth" technology (e.g., towers disguised as trees) especially on freestanding antenna towers in order to blend in with the surrounding environment and minimize visual impacts.

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## 5. IMPLEMENTATION

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Implementation of the City's Development and Sustainable Communities Plans is a major challenge for the City's planners, engineers, and other technical and policy-level personnel, as well as elected officials who determine the allocation of City resources. The plans seek to implement a vision for the future by providing wider guidance for decisions and actions related to land use, public facilities, and infrastructure as well as for zoning matters. As a result, many of their provisions reflect the consultations which occurred throughout the planning process with pertinent implementing agencies and community representatives. It should be noted that implementation will depend on each department's priorities and availability of resources.

Many municipal jurisdictions throughout the United States have instituted comprehensive planning programs that emphasize a proactive community-based planning and implementation process. These local governments seek to establish a strong link between planning policies and guidelines, and specific organization, funding, and actions needed to implement a variety of public and private projects and programs. The following sections of this chapter are intended to strengthen the linkage to implementation to realize the vision of the future presented in this plan.

Implementation of the North Shore Sustainable Communities Plan will be accomplished by:

- Initiating zoning map and development code amendments to achieve consistency with the policies and guidelines of the Sustainable Communities Plan;
- Guiding public investment in infrastructure through Functional Plans and Special Area Plans which support the vision of the Sustainable Communities Plan;
- Reviewing zoning and other development applications based on how well they support the vision for the North Shore;
- Incorporating Sustainable Communities Plan priorities through the Public Infrastructure Map and the City's annual budget process; and
- Conducting a review of the vision, policies and guidelines, and Capital Improvement Program (CIP) priority investments of the North Shore Sustainable Communities Plan every five years and recommending revisions as necessary.

Chapter 5 is organized under the following headings:

## SECTION

5.1 PUBLIC FACILITY INVESTMENT PRIORITIES

5.2 DEVELOPMENT PRIORITIES

5.3 SPECIAL AREA PLANS

5.4 FUNCTIONAL PLANNING

5.5 REVIEW OF ZONING AND OTHER DEVELOPMENT APPLICATIONS

5.6 FIVE-YEAR SUSTAINABLE COMMUNITIES PLAN REVIEW

5.7 IMPLEMENTATION MATRIX

### **5.1 PUBLIC FACILITY INVESTMENT PRIORITIES**

The vision for the North Shore requires the cooperation of both public and private agencies in planning, financing, and constructing infrastructure. The City must take an active role in planning infrastructure improvements, including improvements for wastewater treatment, drainage, parks and public access, and roadways.

### **5.2 DEVELOPMENT PRIORITIES**

Projects to receive priority in the approval process are those which:

- Involve land acquisition and improvements for public projects that are consistent with the Sustainable Communities Plan's vision, policies, and guidelines;
- Involve applications for zoning and other regulatory approvals which are consistent with the Sustainable Communities Plan's vision, policies, and guidelines; and
- Are located on vacant usable parcels within the Community Growth Boundary as shown on the Land Use Map in Appendix A.

### **5.3 SPECIAL AREA PLANS**

For areas requiring particular attention, Special Area Plans provide more detailed policies and guidelines than the Development and Sustainable Communities Plans. The form and content of Special Area Plans depend on what characteristics and issues need to be addressed in greater detail in planning and guiding development or use of the Special Area.

Special Area Plans can be used to guide land use development and infrastructure investment in Special Districts, Redevelopment Districts, or Resource Areas. Plans for Special Districts would

provide guidance for development and infrastructure investment in areas with distinct historic or design character or significant public views. Plans for Redevelopment Districts would provide strategies for the revitalization or redevelopment of an area. Plans for Resource Areas would provide resource management strategies for areas with particular natural or cultural resource values. There are no Special Area Plans proposed in the North Shore Sustainable Communities Plan area.

## 5.4 FUNCTIONAL PLANNING

Functional planning is the process through which various City agencies determine needs, assign priorities, establish timing and phasing, and propose financing for projects within their areas of responsibility that will further the implementation of the vision articulated in the Development and Sustainable Communities Plans. This process may take a variety of forms, depending upon the missions of the various agencies involved, as well as upon requirements imposed from outside the City structure, such as federal requirements for wastewater management planning. Typically, functional planning occurs as a continuous or iterative activity within each agency.

The functional planning process involves annual review of existing functional planning documents and programs by the City agencies responsible for developing and maintaining infrastructure and public facilities or for provision of City services. As a result of these reviews, the agencies then update, if required, existing plans or prepare new long-range functional planning documents that address facilities and service system needs. Updates of functional planning documents are also conducted to assure that agency plans will serve to further implement the Development and Sustainable Communities Plans as well as to provide adequate opportunity for coordination of plans and programs among the various agencies.

The number and types of functional planning documents will vary from agency to agency, as will the emphasis and contents of those documents. A typical agency may develop a set of core documents such as:

- A resource-constrained long-range capital improvement program. A “resource-constrained” program is one which identifies the fiscal resources that can be reasonably expected to be available to finance the improvements.
- A long-range financing plan, with identification of necessary new revenue measures or opportunities.
- A development schedule with top priorities for areas designated for earliest development.

- 1
- 2 • Service and facility design standards, including level of service guidelines for
- 3 determining adequacy.
- 4

5 Other documents may also be developed as part of an agency's functional planning activities,

6 such as master plans for provision of services to a specific region of the island. In some cases,

7 functional planning activities will be undertaken in cooperation with agencies outside the City

8 structure, such as the transportation planning activities that are conducted in association with

9 the O'ahu Metropolitan Planning Organization.

10

11 Functional planning is intended to be a proactive public involvement process which provides

12 public access to information about infrastructure and public facility needs assessments,

13 alternatives evaluations, and financing. Outreach activities should involve Neighborhood

14 Boards, community organizations, landowners, and others who may be significantly affected by

15 the public facilities and infrastructure projects or programs to be developed to further implement

16 the policies of the Development and Sustainable Communities Plans.

17

18 The functional planning process should be characterized by opportunities for early and

19 continuing involvement, timely public notice, public access to information used in the evaluation

20 of priorities, and the opportunity to suggest alternatives and to express preferences. The

21 functional planning process provides the technical background for the Capital Improvement

22 Program and public policy proposals which are subject to review and approval by the City

23 Council.

24

## 25 **5.5 REVIEW OF ZONING AND OTHER DEVELOPMENT**

### 26 **APPLICATIONS**

27

28 A primary way in which the vision of the North Shore Sustainable Communities Plan will guide

29 land use is through the review of applications for zone changes and other development

30 approvals. Approval for all development projects should be based on the extent to which the

31 project supports the vision, policies and guidelines of the Sustainable Communities Plan.

32

33 Projects which do not involve "significant" zone changes will be reviewed by the Department of

34 Planning and Permitting for consistency with the vision, policies and guidelines of the North

35 Shore Sustainable Communities Plan during the zone change application process. Projects

36 which meet the criteria for a "significant" zone change are required to prepare an environmental

37 assessment or environmental impact statement following the provisions of Hawai'i Revised

38 Statutes, Chapter 343. The criteria to establish a zone change as "significant" in need of HRS,

39 Chapter 343 environmental review is defined in the North Shore Sustainable Communities Plan

40 adopting ordinance.

### 5.5.1 Adequate Facilities Requirement

All projects requesting zone changes shall be reviewed to determine if adequate public facilities and infrastructure will be available to meet the needs created as a result of the development. Level of service guidelines to define adequate public facilities and infrastructure requirements will be established during the CIP process.

In order to guide development and growth in an orderly manner as required by the City's General Plan, zoning and other development applications for new developments should be approved only if the responsible City and State agencies confirm that adequate public facilities and utilities will be available at the time of occupancy, or if conditions the functional agency indicates are necessary to assure adequacy are otherwise sufficiently addressed.

The Department of Planning and Permitting will review the project for consistency with the North Shore Sustainable Communities Plan's vision, and summarize any individual agency's findings regarding public facilities and utilities adequacy which are raised as part of the EA/EIS process. The Department will address these findings and any additional agency comments submitted as part of the agency review of the zone change application and recommend conditions that should be included in the unilateral agreement or development agreement to insure adequacy of facilities.

## 5.6 FIVE-YEAR SUSTAINABLE COMMUNITIES PLAN REVIEW

The Department of Planning and Permitting shall conduct a comprehensive review of the North Shore Sustainable Communities Plan and report its findings and recommended revisions to the Planning Commission and the City Council five years after adoption and every five years thereafter. It is intended that the Community Growth Boundary will remain fixed through the 2035 planning horizon.

### 5.6.1 Adoption of the Sustainable Communities Plan and Existing Land Use Approvals

This Sustainable Communities Plan will go into effect upon adoption by ordinance. Land use approvals granted under existing zoning, unilateral agreements, and approved urban design plans will remain in force and guide entitlement decisions until any zoning action to further implement the vision and policies of the North Shore Sustainable Communities Plan is initiated. If an EA or EIS is accepted in the course of a Sustainable Communities Plan land use approval for a project, it should be acceptable to meet the requirement for an initial project EA/EIS when zone change applications are submitted for subsequent phases of the project, unless the project scope and land uses are being significantly changed from that described in the initial EA/EIS.



## 5.7 IMPLEMENTATION MATRIX

This section provides a summary of the specific physical improvements and actions identified in Chapters 3 and 4 of this Plan to help organize and facilitate plan implementation.

Table 5-1 presents the implementing actions, the related plans, regulatory code or action, and the public or private entities responsible for implementing the action. The table is organized by land use category, with the categories listed according to the order of Chapters 3 and 4. A key to the abbreviations used in the table follows at the end of the table.

- The first column of the table –Policies and Guidelines – is comprised of the guideline statements for each land use category. Policy statements are used if the land use category does not include guidelines (e.g., Electrical Systems).
- The second column – Program – relates each statement to a specific regulatory code, functional plan or other action. The term “project review” indicates the review of discretionary land use approvals, such as State land use, zoning and special management area use permits. In some instances, To Be Determined (TBD) was used to indicate that the related code/plan/action was not clear. TBD actions are intended to be identified and developed by the agencies responsible for implementation.
- The third column – Agency – identifies the public and/or private entities responsible for the implementing the policy or guideline. Although many of the implementing actions fall under DPP’s jurisdiction, some actions are the responsibility of other Federal, State or City departments or public agencies, while a few have been assigned to private entities or individual landowners.
- The fourth column identifies the role of the agencies involved in implementation. The three categories identified include implementation, regulation or advocacy.

1  
2

**Table 5-1**  
**Implementation Matrix**

Policies/Guidelines		Program	Agency	Role
<b>Open Space and Natural Environment – Mountain Areas</b>				
1.	Maintain, protect and restore native forests and ecosystems within the State Conservation District and lands designated Preservation on the <u>North Shore Sustainable Communities Plan</u> Land Use Map. Ensure the protection of State conservation lands, especially those on the Ka'ena coastline and Mokulē'ia foothills.	Conservation District Management Plan, Watershed Management Plan	DLNR BWS	Implementer Advocate
2.	Reclassify important watershed areas which are designated but unused State Agricultural or Urban Districts to the State Conservation or City Preservation Districts.	Land Use Ordinance	DLNR DPP	Implementer Implementer
3.	Identify and protect endangered species habitats, native ecosystems, and other important ecologically sensitive areas, including the natural area reserves and forest reserves, from such threats as fire, alien species, feral animals, and human activity.	TBD	DLNR	Implementer
4.	Identify mountain areas within the AG-2 General Agricultural District that are suitable for rezoning to P-2 General Preservation District.	Land Use Ordinance	DPP	Implementer
5.	Avoid the establishment of utility corridors and other uses that would disturb areas with high concentrations of native species.	TBD	DLNR	Regulator
6.	Encourage coordination of natural resource protection and management efforts between the State DLNR and private landowners, as well as with the U.S. Military, especially where the Kahuku and Kawaihoa Training Areas overlap with environmentally sensitive areas.	Conservation District Management Plan	DLNR U.S. Army private entities	Implementer Advocate Advocate
7.	Acquire and maintain public access easements to trail heads and public campgrounds, including parking and signage at trailheads, where appropriate. Such access should be required, as appropriate, for any new development.	TBD	DLNR Na Ala Hele Program	Implementer Implementer
8.	Support State efforts to seek opportunities for cooperative agreements with private landowners to gain access to trails leading to public lands.	TBD	DLNR	Implementer
9.	Implement recommendations in the State's Na Ala Hele Program Plan to maintain and enhance <i>mauka</i> trail systems.	TBD	DLNR	Implementer
10.	Identify historic trails and old government roads of cultural and recreational value to the public.	TBD	DLNR	Implementer
<b>Open Space and Natural Environment – Shoreline Areas</b>				
11.	Preserve rare and sensitive coastal resources including coastal strand vegetation, sand dunes, and anchialine pools. Establish buffer zones around these areas where necessary.	TBD	DLNR DPP	Regulator Regulator

Policies/Guidelines	Program	Agency	Role
12. Prohibit off-road vehicle, motorcycle and bicycle use in ecologically sensitive areas, including coastal dunes and shoreline beaches. Identify and maintain recreational areas specifically designated for such use.	TBD	DLNR DPP DPR	Implementer Regulator Implementer
13. Protect nearshore coral reefs and other marine life from damaging activities such as soil erosion, nonpoint source pollution, dredging of coral reefs, and alterations to nearshore water circulation.	Hawaii Coastal Nonpoint Pollution Control Program Management Plan, Storm Drainage Standards	DLNR CZM Program DPP DDC	Regulator Regulator Regulator Advocate
14. Establish access where justified by public demand, traditional use patterns, high quality recreational resources, or to circumvent barriers that exist along the shoreline	TBD	DPR DDC DPP	Implementer Implementer Regulator
15. Improve and expand public access to the shoreline at approximately ½-mile intervals with vehicular and bicycle parking and lateral access along the shoreline.	TBD	DPR DDC DPP	Implementer Implementer Regulator
16. Implement the recommendations of the State of Hawai'i's Coastal Nonpoint Pollution Control Program and utilize best management practices in agricultural land use and operations to avoid or minimize chemical runoff and other "nonpoint" contaminants in shoreline areas.	Hawaii Coastal Nonpoint Pollution Control Program Management Plan	CZM Program DOH TMDL Program	Implementer Regulator
17. Support research to determine causes of coastal erosion and identify appropriate management strategies to avoid future erosion hazards.	Coastal Erosion Management Plan	DLNR DPP	Implementer Advocate
18. Encourage interagency coordination and public/private cooperation in developing and implementing beach management plans, with an emphasis on nonstructural approaches.	Coastal Erosion Management Plan	DLNR DDC	Implementer Implementer
19. Discourage development or activities which result in beach loss, and encourage development practices or activities such as increased shoreline setbacks which result in beach preservation or enhancement.	CZM Program, Land Use Ordinance, Project Review	Office of Planning DLNR DPP	Implementer Implementer Regulator
20. Require buildings along the shoreline to adhere to the City's and Federal Emergency Management Agency (FEMA) minimum building elevations and structural guidelines. In addition, adopt development standards that require new structures to incorporate building styles compatible with coastal hazards such as coastal erosion, tsunami and hurricane overwash.	Land Use Ordinance, Building Code, Project Review	DPP	Regulator
21. Discourage visual obstructions such as walls and fences along the coastal highway to maintain and enhance existing panoramic views identified on the Open Space Map. Clear shrubs and vegetation on vacant State- and County-owned properties that would maintain views of the ocean from public roadways along the shoreline.	Land Use Ordinance, Project Review	DLNR DOT DPP DFM	Regulator Implementer Regulator Implementer

Policies/Guidelines	Program	Agency	Role
22. Implement active protection and management practices that preserve and enhance native and other resident fish and aquatic species populations and habitats, including nearshore coral reefs. Efforts to enhance opportunities for commercial and recreational fishing should use management practices and techniques that sustain fish populations and habitat quality so as to maintain a quality aquatic environment for public enjoyment.	TBD	DLNR	Implementer
23. Place sand from channel, stream, and harbor mouth dredging projects on local beaches in accordance with Hawai'i Revised Statutes Chapter 205A.	TBD	USACE DLNR	Implementer Implementer
<b>Open Space and Natural Environment – Wetlands</b>			
24. Preserve and maintain all North Shore wetlands and wildlife habitats. When considering future activities/construction in the vicinity of biologically sensitive areas such as wetlands, the preferred sequence will be to: avoid ecologically sensitive areas entirely; minimize potential project impacts; and require mitigation that will offset the loss of resources.	Project Review	DLNR DPP	Regulator/Advocate Regulator/Advocate
25. Support the restoration and protection of 'Uko'a Marsh. Protection can be achieved through fee acquisition, land banking, cooperative agreements with public agencies and private landowners, conservation easements, or other strategies.	TBD	DLNR Kamehameha Schools	Advocate Implementer
26. Support efforts to restore Loko Ea Fishpond as an interactive, productive and functioning aquaculture resource. Promote the development of a cultural learning center providing both visitors and residents opportunities to experience the unique environment around Loko Ea Pond and 'Uko'a Marsh. Possible activities may include tours of a working aquaculture farm, as well as cultural and environmental education programs that teach traditional and modern aquaculture techniques and the history of the Pond and its adjacent areas. Walkways extending north to 'Uko'a Pond could provide opportunities for interpretive nature walks.	TBD	DLNR Kamehameha Schools	Advocate Implementer
<b>Open Space and Natural Environment – Natural Gulches, Streams, and Drainageways</b>			
27. Preserve the aesthetic and biological values of the natural gulches, streams, and drainageways as part of the North Shore's open space system. Where feasible, establish wildlife habitat protective buffer zones and/or setbacks along rivers, streams, and shoreline areas. Where possible, provide public access to these open space and recreational resources.	Watershed Management Plan, Land Use Ordinance, Project Review	DLNR BWS DPP DPR	Regulator/Implementer Advocate Regulator Implementer

Policies/Guidelines	Program	Agency	Role
28. Minimize soil erosion, runoff of pesticides, fertilizers and other nonpoint source contaminants into streams, wetlands, and marine habitats. In addition to stream setback, utilize erosion control devices, integrated pest management plans, and revegetation of disturbed areas. Incorporate erosion control measures and best management practices, as recommended in the State Coastal Nonpoint Pollution Control Program, to prevent pollution of wetlands, streams, estuaries, and nearshore waters.	TBD	DLNR DOA DPP DPR	Regulator/Implementer Implementer Regulator Implementer
29. Limit uses in these areas to conservation uses, compatible recreational uses such as hiking, traditional hunting, fishing, gathering, religious and cultural practices, and controlled diversion for agricultural purposes. Avoid development in ecologically sensitive areas; if activities are allowed, minimize impacts and implement mitigative measures that will fully offset any loss of resources.	Land Use Ordinance, Project Review	DLNR LUC DPP	Regulator Regulator Regulator
30. Preserve and maintain the natural streams and drainageways within the developed areas by designating them as part of the open space system. To the extent possible, limit any modifications to natural gulches and drainageways, unless they are necessary for flood protection, to preserve water quality and protect aesthetic and biological resources.	Watershed Management Plan, Land Use Ordinance, Project Review	DLNR BWS DPP DPR	Regulator Advocate Regulator Advocate
31. If modifications are necessary, mitigate impacts on biological habitats by using stream-side vegetation, rip-rap boulder lining of stream banks, v-shaped bottom channels to maintain a stream flow during low rainfall periods, and other designs to promote aeration.	Land Use Ordinance, Storm Drainage Standards	DPP ENV DDC	Regulator Implementer Implementer
32. Integrate planned improvements to the North Shore drainage system into the regional open space network by emphasizing the use of retention basins and recreational access in the design approach.	Storm Drainage Standards	DLNR DPP ENV DDC	Advocate Regulator Implementer Implementer
<b>Open Space and Natural Environment - Scenic Resources and Scenic Views</b>			
33. Conduct planning with attention to preservation of natural open space, protecting coastal and <i>mauka</i> views from public roadways, and conserving important viewsheds.	Project Review	DLNR DPP	Regulator Regulator
34. When view reductions may come from agricultural activities which intrude into viewplanes or otherwise degrade or diminish scenic qualities, the protection of roadway views should be balanced with the operating requirements of agriculture.	Project Review	DLNR DPP	Regulator Regulator/Advocate
35. Evaluate the impact of land use proposals on the visual quality of the landscape, including viewplane and open space considerations.	Project Review	DLNR DPP	Regulator Regulator/Advocate
36. Site new antennas, telecommunication equipment and alternative energy systems in appropriate locations to minimize their impact on visual resources. Encourage site clustering and techniques that blend the equipment into the natural landscape.	Land Use Ordinance, Project Review	DLNR DPP	Regulator Regulator/Advocate

Policies/Guidelines	Program	Agency	Role
37. Discourage the use and installation of overhead utility lines and poles. Strong consideration should be given to placing replacement and new transmission lines underground. Undergrounding utility lines will enhance viewplanes and increase highway safety. Whenever possible, relocate or place underground overhead utilities that significantly obstruct public views. If unavoidable, locate any future overhead utilities on the <i>mauka</i> side of the public coastal highway.	Utilities Undergrounding Plan, Project Review	PUC HECO Telecommunications providers DDC DPP	Regulator Implementer Implementer Implementer Advocate
38. Minimize the adverse effects of artificial lighting on wildlife and human health by balancing the need of outdoor lighting for night utility, security, and desire for reasonable architectural expression with the need to conserve energy and protect the natural environment.	Land Use Ordinance, Project Review	DPP	Regulator
39. Adopt outdoor night lighting standards that encourage efforts to minimize glare and stray light, and reinforce the differences between urban and rural communities.	Land Use Ordinance	DPP	Implementer
<b>Open Space and Natural Environment - Utility Corridors and Greenways</b>			
40. Provide sufficient easement width for the major trunk lines and transmission lines for utility systems, when their alignment is not within a road right-of-way, to permit the growth of trees within the easement.	TBD	HECO Telecommunications providers DPP DDC	Implementer Implementer Advocate Advocate
41. When overhead transmission lines are located within or adjacent to a road right-of-way, there should be sufficient width to permit the growth of trees adjacent to the transmission line, consistent with the applicable operations, maintenance, and safety requirements. The purpose of the landscaping is to divert attention from the overhead lines and, preferably, obscure views of the overhead line from the travelway and adjacent residential areas.	TBD	HECO Telecommunications providers DOT DPP DDC DTS	Implementer Implementer Advocate Implementer Advocate Regulator
42. Permit the use of utility easements for pedestrian and bicycle routes. Encourage coordination between utility companies, landowners, pertinent agencies, and the community to ensure that safety, liability, and maintenance issues are adequately addressed.	TBD	HECO Telecommunications providers DOT DPP DDC DTS	Implementer Implementer Implementer Advocate Implementer Implementer
43. Encourage the use of indigenous vegetation that is slow growing and thus minimizes the need to use herbicides for vegetation control.	TBD	HECO Telecommunications providers DDC	Implementer Implementer Implementer

Policies/Guidelines	Program	Agency	Role
<b>Agriculture - Agricultural Lands</b>			
44. Promote technologies that support alternative energy sources, including solar, wind, and wave power. Allow community and agency review of individual proposals to ensure compatibility and suitability.	TBD	PUC HECO DPP	Regulator/Advocate Implementer/Advocate Regulator/Advocate
45. Enforce permitted uses on agricultural lands to ensure that the use is contributing to meaningful and credible agricultural production on the same or nearby properties.	Code Enforcement	LUC DPP BFS	Regulator/Advocate Regulator/Advocate Advocate
46. Cluster and locate dwellings near similar uses to preserve open space, maximize the use of productive agricultural lands, and reduce infrastructure costs, when planned as part of an agricultural activity.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
47. Design and site buildings and other facilities that are accessory to an agricultural operation to minimize the visual impact on nearby areas and views from arterial and major collector roads.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
48. Adopt development standards and permitting procedures that simplify and streamline the permitting requirements for uses that support the growth of agriculture, including agricultural support facilities and agriculture-based tourism.	Land Use Ordinance, Project Review	DPP	Implementer
49. Maintain adequate physical buffers between agricultural land uses and surrounding land uses.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
50. Base any subdivision of agricultural lands on the most appropriately sized, viable economic unit for agricultural production.	Subdivision Rules, Project Review	DPP	Regulator
51. Identify and implement – as an immediate high priority action item at the State and County levels – appropriate economic incentives designed to promote and facilitate the growth of diversified agriculture.	TBD	DBEDT DOA City OED	Implementer Implementer Implementer
52. Support agricultural research and development activities targeted towards increasing operational efficiencies, economic returns, and the effective utilization of agricultural lands and supporting infrastructure, which enables sustainable usage of agricultural resources.	TBD	DOA private entities	Implementer Implementer
53. Assist residents to develop skills in agriculture and related specialized industries so that residents can seek local employment in the area.	TBD	DOA DCS UH	Implementer Advocate Implementer
54. Support a mentor program for area teens to learn about agricultural practices, economics, and business so that interest and commitment to agriculture may continue on to future generations.	TBD	DOE DCS DPR UH	Implementer Implementer Advocate Advocate
55. Support the expansion and diversification of aquaculture in the region, including the continued cleanup of the former Dillingham Quarry site in Mokulē'ia and expansion of existing aquaculture operations in the area.	TBD	DOA UH private entities	Implementer Advocate Implementer

Policies/Guidelines	Program	Agency	Role
56. Identify potential sites for aquaculture or mariculture parks.	TBD	DOA private entities	Implementer Implementer
57. Encourage agricultural producers to develop Conservation Plans in conjunction with the West O'ahu Soil and Water Conservation District to manage and protect natural resources.	TBD	DOA WO SWCD private entities	Advocate Implementer Implementer
58. Assist governmental agencies and landowners to upgrade and maintain existing infrastructure networks, including roads and irrigation systems.	TBD	DFM DDC	Advocate Advocate
59. Improve the quality of irrigation water from Lake Wilson.	Wastewater Facility Plan	DOH ENV	Advocate Implementer
60. Work with the State to identify and protect Important Agricultural Lands (IAL) as defined by Act 183 (2005).	IAL, Act 183 (2005)	DOA Dept. of Taxation DPP private entities	Advocate Advocate Implementer Implementer
<b>Agriculture – Agricultural Support Facilities</b>			
61. Develop agricultural support facilities in Waialua and Kailua.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
62. Ensure that permitted agricultural support facilities do not adversely affect agricultural production in the area or present health hazards or nuisances to adjacent areas.	Land Use Ordinance, Project Review, Code Enforcement	DPP	Regulator/Advocate
63. Require all agricultural support facilities in the region to maintain a direct relationship to local agricultural production.	Land Use Ordinance, Project Review, Code Enforcement	DPP	Regulator/Advocate
64. Site and design facilities to minimize development impacts and maximize the amount of farmland preserved.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
<b>Agriculture – Agriculture-Based Tourism</b>			
65. Allow agricultural, recreational and educational programs, and limited outdoor recreational or other uses if the activity is complementary to the primary agricultural use of the land and it does not interfere with the agricultural use of the site.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
66. Monitor tourism-related activities conducted on agricultural lands to ensure that such activities do not adversely impact on-site or adjacent agricultural activities or other resources.	Code Enforcement	DPP	Implementer
67. Provide technical and business development support for visitor-related proposals.	TBD	DBEDT DOA City OED	Implementer Implementer Implementer
68. Identify and develop a convenient, suitable location in or near Hale'iwa and/or Waialua Town to establish a farmers' market where farmers can market products locally.	TBD	private entities	Implementer



Policies/Guidelines	Program	Agency	Role
69. Identify and develop a permanent site in the Sunset Beach vicinity to promote the North Shore Country Market.	TBD	private entities	Implementer
70. Develop an agricultural museum that includes a demonstration area showing various crops in different stages of growth and processing.	TBD	private entities	Implementer
<b>Agriculture – Agriculture-Based Tourism</b>			
71. Develop Hale'iwa Beach Park Mauka as a community-based park to expand active recreational facilities for North Shore residents.	Park Master Plan	DPR DDC	CIP CIP
72. Acquire Pu'uiki Park for community use.	Park Master Plan	DPR DDC	CIP CIP
73. Expand Waialua District Park by acquiring agricultural land across Goodale Avenue.	Park Master Plan	DPR DDC	CIP CIP
74. If new residential development occurs, it should provide land for open space and recreation purposes at a minimum of two acres per 1,000 residents. Community-based parks (and associated service radius) include miniparks (1/2 mile), neighborhood parks (1/2 mile), community parks (one mile), and district parks (two miles).	Project Review	DPP DPR	Regulator/Advocate Implementer
75. Locate community and neighborhood parks which emphasize intensive uses such as ball fields, playing courts, and community buildings in or adjacent to the neighborhoods or communities they serve, in order to maximize accessibility.	Park Facilities Functional Plan	DPR DDC	Implementer Implementer
76. Provide more youth activities, programs and facilities on the North Shore.	Park Facilities Functional Plan	DPR	Implementer
<b>Parks and Recreation – Mauka Areas</b>			
77. Expand public access to the upland or <i>mauka</i> areas for appropriate types of recreational activities that are low-impact, resource-sensitive and do not compromise significant environmental resources and important agricultural activities. These would include nature-based activities such as picnicking, camping, hiking, mountain biking, hunting and the appreciation of scenic, natural and cultural resources.	TBD	DLNR DPR DDC	Implementer Implementer Implementer
78. Acquire and maintain public and/or private campgrounds and hiking trails in the <i>mauka</i> areas.	TBD	DLNR DPR DDC	Implementer Implementer Implementer
79. Develop a system of <i>mauka</i> trails and paths to interconnect the major recreational areas of the North Shore for use by nonmotorized transportation modes, e.g., walking, biking, horseback riding.	TBD	DLNR DPR DDC	Implementer Implementer Implementer
80. Coordinate planned private and public actions pertaining to trails and access. Identify historic trails and old government roads of cultural and recreational value to the public.	TBD	DLNR DPR	Implementer Implementer

Policies/Guidelines	Program	Agency	Role
<b>Parks and Recreation - Beach Parks and Shoreline Areas</b>			
81. Limit new developments along the shoreline to parks and other compatible open space uses.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
82. Improve and expand public access to the shoreline at approximately one-half mile intervals in rural areas of the North Shore, or at closer intervals where justified by public demand, traditional use patterns, the quality of the recreational resources, emergency services response time, or to bypass natural barriers that impede public access to the shoreline.	Park Facilities Functional Plan, Project Review	DPR DPP	Implementer Regulator/Advocate
83. Maintain and expand lateral access along the coast, especially in areas with high recreational or scenic value, including the shoreline along Sunset Beach and Kawaihoa where access to popular sandy beaches and surf spots are in demand.	Park Facilities Functional Plan	DPR DFM	Implementer Implementer
84. Limit uses within beach parks and nearshore ocean area uses to preserve overall environmental quality, rural character, scenic views, and open space.	Land Use Ordinance, Project Review	DPP	Regulator
85. Provide adequate public parking and related support facilities (such as rest rooms and showers) at popular beach parks, including lifeguard equipment storage facilities in anticipation of increased lifeguard services needed at those parks. Improvements are planned for North Shore beach parks at Pu'uiki Beach, Laniākea, Chun's Reef, Kawaihoa, Leftovers, Uppers, Kahawai, Banzai Rock, Kaunala, and Waiale'e.	Park Facilities Functional Plan, Park Master Plans	DPR DDC	Implementer Implementer
86. Acquire shoreline properties as opportunities arise or obtain public use easements and maintenance agreements with private landowners, especially lands adjacent to existing public parks.	Park Facilities Functional Plan	DPR DFM	Implementer Implementer
<b>Parks and Recreation - Maintenance and Management of Parks, Recreation Areas and Recreational Resources</b>			
87. Provide sufficient resources – including funding and manpower – to ensure that public facilities are adequately maintained.	Operations Budget	DLNR DPR DFM BFS	Advocate Implementer Implementer Implementer
88. Identify limitations on recreational resources and implement policies to regulate and mitigate impacts to these resources.	TBD	DLNR DPR DPP	Implementer Implementer Regulator/Advocate
89. Establish and enforce rules and regulations to mitigate conflicts among recreational activities.	Code Enforcement	DLNR DPP	Implementer Implementer
90. Engage public and private organizations in partnership with government agencies to maintain recreational resources.	Facility Management Plans	DLNR DPR	Implementer Implementer

Policies/Guidelines	Program	Agency	Role
<b>Parks and Recreation - Site Design of Recreational Facilities</b>			
91. Incorporate natural and/or cultural features of the site and use landscape materials that are indigenous to the area, where feasible, into the design of recreation facilities and areas.	Project Review	DPP DDC	Implementer/Advocate Implementer
92. Locate uses that generate high noise levels away from existing and planned residential areas.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
93. Design and site improvements and landscaping to enhance the rural character and the aesthetic value of open space elements and natural resources.	Project Review	DPP DDC	Regulator/Advocate Implementer
94. Provide pedestrian and bicycle pathways from surrounding streets to parks, to facilitate convenient access to the parks.	Project Review, Bicycle Master Plan	DOT DTS DPP DDC	Implementer Implementer Regulator/Advocate Implementer
95. Site parks and recreational attractions intended for regional or island-wide uses along or near regional roadways.	Land Use Ordinance, Project Review, Park Facilities Functional Plan, Park Master Plans	DLNR DPP DPR	Implementer Regulator/Advocate Implementer
96. Minimize environmental impacts (such as siltation, pesticide and fertilizer runoff) of recreational facilities and activities. Expansive recreational facilities, such as community and regional parks, should comply with State Department of Health guidelines related to ground and nearshore water quality.	Project Review, Facility Maintenance Plans	DPP DPR private entities	Regulator/Advocate Implementer Implementer
<b>Parks and Recreation - Recreational Activities that Support the North Shore's Economy</b>			
97. Promote recreational and specialty events such as surf meets, fishing tournaments, bike tours, races and other competitions which contribute to the North Shore's economy. Such events shall meet State and City rules and regulations for park and ocean uses to avoid conflict with recreational uses.	TBD	City OED private entities	Advocate Implementer
98. Manage impacts to the recreational resource and surrounding communities (such as noise, parking, traffic, etc.) associated with special events.	Project Review	DOT DPR DTS	Regulator Regulator Regulator
99. Promote instructional programs, training clinics and other activities that cater to the health and recreation industry and which will not impact the North Shore's rural character.	TBD	private entities	Implementer
100. Explore the potential of equestrian activities, such as trail rides and riding adventures, as an adjunct to the area's attractions.	TBD	private entities	Implementer

Policies/Guidelines	Program	Agency	Role
101. Support equine activities through a variety of means, including establishment of well-designed, safe riding trail networks linking destinations in the rural communities and in the <i>mauka</i> areas that have long been used by riders. Cooperative agreements for the development and maintenance of such networks should be forged through public-private partnerships.	TBD	DLNR private entities	Advocate Implementer
<b>Historic and Cultural Resources</b>			
102. Implement in situ preservation and appropriate protection measures for sites that have high preservation value because of their good condition or unique, historic, cultural and archaeological features, and for which the State Historic Preservation Division has recommended such treatment.	Chapter 6E, HRS TBD	DLNR	Regulator/Advocate
103. Consider the particular qualities of a site and its relationship to its physical surroundings when determining the appropriate treatment for a site. Determine appropriate preservation measures, site boundaries and setbacks, and development restrictions on a site-by-site basis in consultation with the State Historic Preservation Division.	Chapter 6E, HRS	DLNR DPP	Regulator/Advocate Regulator/Advocate
104. Include input from all pertinent community resources in the development of a site preservation plan.	TBD	DLNR DPP	Implementer Advocate
105. Include sight lines and view planes that are significant to the original purpose and value of the site in criteria for adjacent use restrictions.	TBD	DLNR	Regulator
106. Determine the appropriateness of public access on a site-by-site basis in consultation with the State Historic Preservation Division, Hawaiian cultural organizations, and the owner of the land on which the site is located.	TBD	DLNR DPP	Regulator/Advocate Regulator/Advocate
<b>Residential Communities – Rural</b>			
107. Utilize a traditional density of one unit per acre with lots ranging in size from one to three acres, although alternative layouts that promote clustering are encouraged. Limit buildings to two stories or 25 feet, although the height may vary according to required flood elevation, slope, and roof form.	Land Use Ordinance, Project Review	DPP	Regulator
108. Ensure compatibility between country-district uses and adjacent agricultural lands, natural resources, views, or cultural features.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
<b>Residential Communities – Rural Residential</b>			
109. Densities range from five to eight units per acre, or up to 10 units per acre for alternative development options which enhance rural character and maximize consolidated, usable open space. Lot sizes range from 5,000 square feet to 10,000 square feet, allowing the application of optional design standards. For smaller lot developments of less than 5,000 square feet, alternative clustering is encouraged.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate

Policies/Guidelines	Program	Agency	Role
110. Use rural development standards to determine appropriate scale and character, smaller building footprints, greater setbacks, and more landscaping (use of hedges to create walls and grassed front yards, and rural roadways with no sidewalk, curbs, and gutters).	Land Use Ordinance, Subdivision Rules, Project Review	DPP	Regulator/Advocate
111. Avoid monotonous rows of garages and driveways along neighborhood street frontages by employing features such as varied building setbacks and shared driveways.	Land Use Ordinance, Subdivision Rules, Project Review	DPP	Regulator/Advocate
112. Plan and design new or infill housing development, as well as modifications to existing homes, to be generally compatible with the predominant form and character of existing homes on adjacent properties and with the neighborhood as a whole.	Land Use Ordinance, Subdivision Rules, Project Review	DPP	Regulator/Advocate
113. Use plantation architectural features such as pitched roofs in varied forms, exterior colors and finishes, building orientation, floor plans and architectural details to provide visual interest and individual identity and accentuate the rural setting. In general, buildings are to be less than two stories or 25 feet, although the height may vary in response to required flood elevation, slope, or other physical site constraints.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
114. Support affordable housing initiatives in areas designated for new housing development.	Land Use Ordinance, Zone Change Unilateral Agreement, Housing Development Programs	HPHA DPP DCS	Implementer/Advocate Regulator Implementer/Advocate
<b>Residential Communities – Low-Density Apartment</b>			
115. Maintain the existing apartment district boundaries.	Land Use Ordinance, Project Review	DPP	Regulator
116. Densities range from 10 to 20 units per acre. Buildings should not be more than three stories or exceed 40 feet in height.	Land Use Ordinance, Project Review	DPP	Regulator
117. When possible, enhance the compatibility of development within apartment district uses with adjacent residential uses.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
118. Employ building form, orientation, location of entries and landscape screening that reflects single-family residential character and provides greater privacy and individual identity for housing units.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
119. Ensure compatibility of building scale, roof form and the quality of materials with those of adjacent residential areas.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
<b>Residential Communities – Special Needs Housing</b>			
120. Locate special needs housing within or near Hale'iwa or Waialua Towns within close proximity to public transit, community services and commercial activities, but not so clustered together to create a significant change to neighborhood character, especially as viewed along collector roads.	Land Use Ordinance, Project Review, Housing Development Programs	HPHA DPP	Implementer/Advocate Regulator

Policies/Guidelines	Program	Agency	Role
121. As an exception to standard density situations, special needs housing may have densities of up to 20 units per acre, not including beds in skilled nursing facilities, if they consist primarily of smaller dwelling units with residential scale and character. Proposals for special needs housing should be subject to community and agency review.	Land Use Ordinance, Project Review	DPP	Regulator
122. Limit building heights in line with the region's rural character.	Land Use Ordinance, Project Review	DPP	Regulator
123. Ensure compatibility of building scale, roof form, and materials with adjacent residential areas.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
<b>Commercial Areas – Hale'iwa Country Town</b>			
124. Limit building heights to two stories, and employ building design elements which reflect the architectural characteristics of the early 1900-period architecture identified in the Hale'iwa Special District Design Guidelines.	Land Use Ordinance, Project Review	DPP	Regulator
125. Incorporate generous, functional, public and open spaces reflective of the town's agricultural heritage.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
126. Encourage commercial and related activities that are conducive to the pedestrian character to locate at the sidewalk level along Kamehameha Highway. Encourage less pedestrian-dependent and conducive activities (such as manufacturing areas for products and compatible light industrial uses, residences, services, etc.) to locate behind or above commercial activities so as not to detract from the commercial retail character of Kamehameha Highway.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
127. Focus the town's commercial core around a mix of compatible activities such as recreation, marine-related enterprises, farmers' markets, historic and cultural attractions, "clean" light industrial, small businesses and offices, civic and governmental services, businesses and retail activities for both residents and visitors.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
128. Upgrade drainage, wastewater, and water infrastructure within Hale'iwa Town, as needed.	Infrastructure Facility Plans	ENV DDC BWS	Implementer Implementer Implementer
129. Support home-based businesses and "Mom and Pop" type stores within the town center.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
130. Concentrate new development near existing built areas emphasizing redevelopment and infill along Kamehameha Highway, <i>makai</i> of the Hale'iwa Joseph P. Leong Highway (Hale'iwa Bypass Road). Provide adequate landscaped buffer adjacent to the bypass.	Landscape Plan, Land Use Ordinance, Project Review	DOT DPP	Implementer Regulator/Advocate
131. Ensure that commercial uses adjoining the Kamehameha Highway corridor include support facilities such as parking lots and rest rooms that can adequately accommodate the planned commercial activities.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate

Policies/Guidelines	Program	Agency	Role
132. Support the expansion and enhancement of Hale'iwa Harbor. If possible, integrate the harbor's attractions and facilities with commercial activities in Hale'iwa Town.	TBD	DLNR	Implementer
133. Expand indoor recreational and educational facilities and programs (museums, movie theater, gym, and cultural performance theaters) and historical, cultural, and arts programs to further enrich Hale'iwa's civic core.	TBD	DPR DDC private entities	Implementer Implementer Implementer
134. Provide improved, expanded, and continuous pedestrian walkways linking commercial establishments within Hale'iwa, including connections between farmers' markets or other kinds of agricultural product and retail outlets, and open space and environmental resources (such as beach parks, Hale'iwa Harbor and Loko Ea Pond).	Capital Improvement Program, Project Review	DOT DTS DPP	Implementer Advocate Regulator/Advocate
135. Enhance the attractiveness and general landscaped open space character of the area by providing roadway improvements, street trees, streetlights, street furniture, and signage compatible with the rural character of Hale'iwa Town.	Capital Improvement Program, Project Review	DOT DTS DPP	Implementer Advocate Regulator/Advocate
136. Continue to use and support production of a visitors' map showing attractions and services in Hale'iwa.	TBD	private entities	Implementer
137. Maintain Kamehameha Highway as a two-lane thoroughfare through Hale'iwa Town.	O'ahu Regional Transportation Plan	OMPO DOT DTS	Advocate Implementer Advocate
138. Consolidate off-street parking to areas behind buildings, while retaining existing on-street parking wherever possible and appropriate. As needed, parking should be rearranged to accommodate the pedestrian walkway system along Kamehameha Highway.	Capital Improvement Program, Project Review	DTS DPP private entities	Advocate Regulator/Advocate Implementer
139. Provide signage and other forms of orientation to help direct motorists through the town to major facilities and to off-street parking facilities.	Capital Improvement Program,	DOT DTS DPP	Implementer Implementer Regulator/Advocate
140. Improve conditions for transit and bicycling through Hale'iwa Town by providing better designed and located bus stops, and a designated bike lane through the town.	Capital Improvement Program, Bicycle Master Plan	DOT DTS	Implementer Implementer
141. Enhance Weed Junction and Kamehameha Highway/Joseph P. Leong Junction, which are entry points to Hale'iwa, in a manner which conveys their gateway functions through appropriate design, landscaping, signage and painting.	Capital Improvement Program	DOT private entities	Implementer Implementer
142. Encourage private and community-based initiatives to protect and enhance the streams, wetlands, and other natural resources within Hale'iwa Town. Retain the agricultural use adjacent to Weed Junction and the Preservation designation at Loko Ea Pond.	TBD, Land Use Ordinance	DLNR ENV DPP	Implementer Advocate Regulator/Advocate

Policies/Guidelines	Program	Agency	Role
<b>Commercial Areas – Waialua Country Town</b>			
143. Ensure new developments are consistent with the <u>Waialua Town Master Plan</u> recommendations for the town center.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
144. Integrate neighborhood parks and community-oriented recreation areas into new residential development.	Land Use Ordinance, Project Review, Parks Master Plan	DPP DPR DDC	Regulator/Advocate Implementer implementer
145. Locate churches and public facilities in or near the town.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
146. Retain large, readily accessible open spaces where outdoor recreation facilities and neighborhood gardens create open vistas and green spaces. Retain open space entrances to the town core, including Weed Junction, Thompson Corner, and Waialua Beach Road, with Waialua Park as the entrance to the country town district.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
147. Incorporate significant historic features from the plantation era and earlier periods into new developments, where feasible and appropriate. Existing buildings of historical, cultural and/or architectural significance, such as the surviving elements of the Waialua Mill, should be preserved and maintained through rehabilitation and adaptive reuse. Where feasible, adapt and highlight these structures as landmarks and icons representative of Waialua's plantation town history.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
148. While buildings in the commercial core may be two stories in height, one-story heights should be emphasized, in keeping with the area's historic scale and to preserve the prominence and views of existing mill structures.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
149. New commercial buildings should be similar in architectural character, scale and materials to historic structures such as the former Waialua Sugar Company offices and the Waialua Library.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
150. Use design guidelines described in the <u>Waialua Town Master Plan</u> to promote and develop a special image for Waialua's commercial and industrial core that reflects the town's historic character and reinforces the town's role as the cultural and business center for Waialua. Encourage renovations and new construction in accordance with the design guidelines.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
151. Provide pedestrian and bicycle access between surrounding residential neighborhoods and Waialua's commercial core.	Local Circulation Plan, Bicycle Master Plan, Project Review	DOT DTS DDC DPP	Implementer Implementer Implementer Regulator/Advocate
152. Encourage infill development and new commercial development around Kealohanui Street to strengthen the town core and provide the critical mass necessary in developing a healthy town center.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate



Policies/Guidelines	Program	Agency	Role
153. Direct new residential development outside but adjacent to the town core, as generally indicated on the Land Use Map.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
154. Locate industrial uses around the former sugar mill (see Section 3.7 Industrial Areas for applicable policies and guidelines).	Land Use Ordinance, Project Review	DPP private entities	Regulator/Advocate Implementer
155. Promote agricultural support activities at the agricultural support area adjacent to the mill site.	Land Use Ordinance, Project Review	DPP private entities	Implementer Implementer
156. New housing units should incorporate rural features (such as small building footprints, larger setbacks, and more landscaping) and be sited and organized to give a strong sense of community.	Land Use Ordinance, Project Review, Housing Development Programs	HPHA DPP DCS	Implementer Regulator Implementer
157. Work with developers to establish housing programs that place high priority on the needs of existing Waiialua residents.	TBD	HPHA DCS	Implementer Implementer
158. Provide job or entrepreneurial opportunities for area residents, and make available training programs for new jobs and businesses.	TBD	DCS private entities	Implementer Implementer
159. Promote historical and cultural attractions such as museums or activity centers that illustrate the history of the community or feature current agricultural operations near the mill site to encourage visitors to Waiialua Town.	TBD	private entities	Implementer
160. Encourage computer-oriented, high technology business, health care, and medical services to locate in Waiialua.	TBD	private entities	Implementer
161. Provide for safe and pleasant pedestrian circulation along the storefronts. As it redevelops, emphasize pedestrian circulation along Kealohanui Street. Retain a distinctive pedestrian-oriented commercial area for residents and visitors through the use of signage, street furniture, and street tree plantings to encourage walking and biking.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
162. Support production of a map showing services in Waiialua and attractions in the region, such as Ka'ena Point and nearby beach parks.	TBD	private entities	Implementer
163. Promote Kealohanui Street as a pedestrian-oriented promenade in Waiialua.	Project Review	DPP	Regulator/Advocate
164. Link proposed pedestrian walkways to the Waiialua Town core, including linkages to proposed farmers' markets and other kinds of agricultural product and retail outlets.	Project Review, Capital Improvement Program	DPP DTS DDC	Regulator/Advocate Implementer Implementer
165. Provide convenient parking that should be landscaped and screened from roadways.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
166. Enhance Waiialua Beach Road and Farrington Highway as gateways to Waiialua Town through signage and landscaping.	Capital Improvement Program	DOT DTS DDC	Implementer Implementer Implementer

Policies/Guidelines	Program	Agency	Role
167. Plant street trees to enhance the pedestrian experience and to create a strong streetscape image. A detailed street tree and planting plan should be developed and implemented as part of the right-of-way plan.	Land Use Ordinance, Project Review, Capital Improvement Program	DPP DTS DDC	Regulator/Advocate Implementer Implementer
<b>Commercial Areas – Rural Community Commercial Center</b>			
168. Limit rural community commercial centers to existing zoned areas between Pūpūkea Road and Pāhoehoe Road that currently serve the commercial needs of residents and visitors.	Land Use Ordinance, Project Review	DPP	Regulator
169. Design rural community commercial centers to provide a compact and efficient organization of various commercial services which primarily serve the immediate community.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
170. Architectural scale and character should respect the surrounding natural features, and adjacent residential areas. Buildings should reflect a rural character compatible with surrounding open spaces and adjacent residential use.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
171. Limit building heights to no more than two stories.	Land Use Ordinance, Project Review	DPP	Regulator
172. Locate parking behind buildings or provide parking that is landscaped. Parking should be visually screened from the street and adjacent residential lots, by planting a landscaped screen of trees and hedges along street frontages and property lines and planting shade trees throughout the parking lot.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
173. Incorporate pedestrian and bicycle facilities, including bicycle paths and storage racks, and off-site improvements such as crosswalks.	Project Review	DPP	Regulator/Advocate
174. Site bus stops in close proximity to rural community commercial centers.	Bus Facilities and Systems Plans, Project Review	DTS	Implementer
<b>Commercial Areas – Country Stores</b>			
175. Design country stores to be small-scale, freestanding, compact commercial facilities. Prohibit country stores from expanding to larger, continuous commercial strip types of developments along arterial roads.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
176. Limit country stores primarily to retail uses that provide services to the surrounding community.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
177. Architectural scale and character should respect the surrounding natural features, and adjacent residential areas. Buildings should reflect a rural character compatible with surrounding open spaces and adjacent residential uses.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
178. Limit building heights to one story.	Land Use Ordinance, Project Review	DPP	Regulator

Policies/Guidelines	Program	Agency	Role
179. Locate parking behind buildings, or provide parking that is landscaped. Parking should be visually screened from the street and adjacent residential lots, by planting a landscaped screen of trees and hedges along street frontages and property lines and planting shade trees throughout the parking lot.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
180. Promote pedestrian and bicycle access to country stores.	Project Review	DPP	Regulator/Advocate
181. Assist business owners with maintaining their financial stability to ensure that country stores remain in operation.	TBD	City OED DBEDT	Advocate Advocate
<b>Industrial Areas</b>			
182. Maintain adequate open buffer zones between industrial activities and residential districts.	Land Use Ordinance, Project Review	DPP	Regulator
183. Minimize impacts (views, noise and smells) and reduce the visibility of large building masses, machinery elements, parking, storage areas, industrial equipment and operation areas through proper site planning and landscape plantings.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
184. Encourage uses which have few environmental impacts and those which complement the development scale of the surrounding community.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
185. Allow low-impact, service industrial uses in enclosed buildings within the Hale'iwa and Waialua Country Town Districts, so as not to detract from the pedestrian-oriented commercial/retail character of roadways, such as Kamehameha Highway, Kealahanui Street, and Goodale Avenue. These could include manufacturing of clothing, arts and crafts and surfboard repair.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
186. Building height and form should reflect the contexts of their sites. At the Waialua Mill site, they should follow guidelines reflecting the Mill's image. In Hale'iwa Town, they should follow the Hale'iwa Special District Design Guidelines. In Waialua Town, they should be consistent with guidelines of this document and the <u>Waialua Town Master Plan</u> . In general, buildings should be designed to reflect the architectural character of Hale'iwa or Waialua Town. Basic design principles, texture, construction materials, and colors should be compatible with the styles from the era and surrounding buildings.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
187. Where taller vertical structures are required as part of an industrial operation, site and design such structures to minimize impacts on view planes and reduce visibility from scenic vistas, public roadways, residential areas, commercial areas, parks, and other significant open space areas.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
188. Limit industrial uses located along the shoreline to water-dependent activities (such as boat repair and maritime-related activities). Consider environmental, visual, and noise impact during the permit application process.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate

Policies/Guidelines	Program	Agency	Role
189. Maintain and upgrade infrastructure to support industrial facilities.	Infrastructure Facility Plans	ENV DDC BWS	Implementer Implementer Implementer
<b>Visitor Accommodations</b>			
190. Allow visitor accommodations in Hale'iwa Town to help restore and promote the historic character of the town.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
191. Design visitor accommodations to be consistent with the Hale'iwa Special District Design Guidelines. In general, visitor accommodations should be small in scale (limited to two stories in height), be compatible with the architectural style and character of Hale'iwa Town, and observe the same building envelopes and design standards of adjacent buildings.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
192. Provide convenient and safe access for pedestrians and vehicles.	Capital Improvement Program, Land Use Ordinance, Project Review	DOT DTS DPP	Implementer Implementer Regulator
193. Incorporate mixed use that caters to pedestrian activity located on the ground floor and visitor accommodations provided on the upper floor.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
194. Provide adequate off-street parking which is landscaped and screened from public roadways.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
195. Address the streetscape and provide a setting that is conducive to pedestrian activity, when located along pedestrian-oriented streets.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
196. Ensure that existing and/or proposed infrastructure can adequately accommodate the proposed development and associated visitor population.	Project Review	DPP	Regulator/Advocate
197. Minimize impacts (noise, traffic, parking, visual) on surrounding activities/properties and from public roadways.	Land Use Ordinance, Project Review	DPP	Regulator/Advocate
197A. Prohibit the granting of new permits, including nonconforming use certificates for B&B and vacation rental operations on the North Shore.	Land Use Ordinance, Project Review, TBD	DPP	Regulator/Implementer
<b>Institutional Uses</b>			
198. Colocate neighborhood or community parks with elementary or intermediate schools and coordinate design of facilities when efficiencies in development and use of athletic, meeting and parking facilities can be achieved.	Park Facilities Functional Plan, Park Master Plans	DPR DDC DOE	Implementer Implementer Advocate
199. Colocate social, social service institutions, and other public service agencies to provide convenient one-stop services to the region.	Facility Master Plans	DDC	Implementer

Policies/Guidelines	Program	Agency	Role
<b>Military</b>			
200. Encourage all government agencies (City, State, and Federal) to coordinate efforts with the U.S. military, especially where the Kahuku and Kawaihoa Training Areas overlap with environmentally sensitive areas.	Conservation District Management Plan	DLNR	Advocate
201. Encourage the military to provide appropriate infrastructure services to support military uses on their lands and minimize any potential impacts to the region.	Base Master Plan	U.S. Army	Implementer
202. Work with the military to allow use of Drum Road as an emergency access bypass route during natural disasters or other emergency incidents.	TBD	U.S. Army DOT	Implementer Implementer
203. Encourage low-rise military facilities that support educational and recreational programs and are compatible with the region on military reservation lands such as Dillingham Airfield.	Base Master Plan	U.S. Army	Implementer
<b>Transportation Systems</b>			
204. Establish rural streetscape design and development standards within residential areas consistent with the rural character of the region. Allow for rural elements that reduce the amount of impervious surfaces, such as minimum pavement widths to support traffic demands and emergency vehicle access, shared driveways, reduced parking requirements, more landscaping, and grassed swales as an alternative to sidewalks with curbs and gutters.	Land Use Ordinance, Subdivision Rules	DPP	Implementer/Regulator
205. Emphasize accessibility from residential streets to bus routes, parks, schools and commercial centers. Design roadways to facilitate the use of alternative transportation forms, including bicycle and pedestrian travel, and personal motorized devices.	Land Use Ordinance, Subdivision Rules	DPP	Regulator
206. Provide scenic lookout points to minimize hazards created by slower sight-seeing traffic and to enhance the appreciation of the region's scenic resources.	TBD	DOT	Implementer
207. Provide appropriately sited and designed off-street parking areas at popular beach parks wherever feasible, including parking in support parks <i>mauka</i> of the highway.	Park Master Plans	DPR DDC	Implementer Implementer
208. Study the safety and feasibility of developing passing zones on Kamehameha Highway and Kaukonahua Road from Hale'iwa/Waialua to Wahiawā to reduce traffic delays due to slower moving vehicles, and to improve safety conditions.	TBD	DOT	Implementer
209. Provide safety improvements along Kaukonahua Road and Kamehameha Highway from the Joseph P. Leong Highway (Hale'iwa Bypass Road) to Wahiawā and beyond. Promote the development of emergency runaway vehicle ramps on Kamehameha Highway and Kaukonahua Road, from Wahiawā to Hale'iwa/Waialua.	TBD	DOT	Implementer

Policies/Guidelines	Program	Agency	Role
210. Approve new residential and commercial development only if the State DOT and the City DTS certify that adequate transportation access and services can be provided.	Project Review	DPP	Implementer
211. Continue to include the daily visitor population that visits the North Shore in determining allocations of resources and facilities for the North Shore.	Capital Improvement Program	DLNR DPR DFM BFS BWS	Implementer Implementer Implementer Implementer Implementer
212. Promote the use of transportation demand management strategies, including measures such as ride-sharing (car/van pooling), improved bus service and routes, the use of non-vehicular travel modes, modified work hours and teleworking to reduce commutes.	TBD	DOT DTS	Implementer Implementer
213. Protect the natural resources of Ka'ena Point from potentially damaging vehicular traffic. Prohibit construction of a roadway around Ka'ena Point.	Ka'ena Point Natural Area Reserve Management Plan, Land Use Ordinance	DLNR	Implementer/Advocate
214. Provide pedestrian-friendly walkways, off-street parking, bus pull-outs, tour bus maneuvering areas, and drainage improvements in Hale'iwa Town.	Capital Improvement Program, Land Use Ordinance, Project Review, Facility Improvement Plans	DOT DTS DPP DDC	Implementer Implementer Regulator/Advocate Implementer
215. Improve the main roadways within Hale'iwa and Waialua Country Town Districts with shade trees, landscaping, sidewalks, street furniture, and signage to promote pedestrian orientation within these country towns.	Capital Improvement Program, Project Review	DOT DTS DPP	Implementer Implementer Regulator/Advocate
216. Create a regional pedestrian/bikeway system linking the parks, schools and town centers in Hale'iwa and Waialua with outlying communities.	Bicycle Master Plan	DOT DTS	Implementer Implementer
217. Coordinate bikeway development with responsible State and City agencies and private landowners to ensure that safety, liability, and a mixture of use issues are adequately addressed.	Bicycle Master Plan	DOT DTS	Implementer Implementer
218. Locate bus stops to be convenient and accessible to residential areas and hubs of community activity.	Bus Facilities and Systems Plans, Project Review	DTS	Implementer
219. Design bus shelters to provide weather protection for bus passengers and complement the natural setting.	Bus Facilities and Systems Plans, Project Review	DTS	Implementer
220. Explore the possibility of a Historic Hale'iwa Trolley as an alternative for visitors to experience the North Shore.	TBD	DTS private entities	Advocate Implementer
221. Encourage the State to upgrade, maintain, and expand the boating facilities at Hale'iwa Harbor to meet the needs of recreational and commercial fishing and leisure boating activities.	Facility Master Plan	DLNR	Implementer
222. Maintain small aircraft, general aviation and other recreational, commercial, or other military uses at Dillingham Airfield in cooperation with the U.S. Army. As necessary, upgrade and maintain facilities to support airfield use.	Facility Master Plan	DOT	Implementer

Policies/Guidelines	Program	Agency	Role
223. Limit uses in the vicinity of Dillingham Airfield to those that are compatible with aircraft noise levels and overflights from the airfield.	Land Use Ordinance, Project Review	DPP	Regulator
224. Identify and maintain former cane haul roads and other <i>mauka</i> roads to provide for the safe and quick evacuation of residents and the movement of emergency response personnel (e.g., fire, police, ambulance) in the event that the primary highways become impassable due to natural disasters or other emergency incidents. Investigate the use of the following for safety and emergency access: the cane haul road system <i>mauka</i> of Farrington Highway in Mokolē'ia; the roads connecting with Drum Road including cane haul road (Twin Bridge Road) in Hale'iwa, Kawaihoa Road, Ashley Road, Pūpūkea Road and Motocross/Kaunala Road. COMSAT/Girl Scout Camp (Paumālū) Road does not connect with Drum Road and would be for evacuation use only.	Capital Improvement Program	DTS DEM	Implementer Implementer
<b>Water Systems</b>			
225. Confirm that adequate potable and nonpotable water is available before approving new residential or commercial development.	Project Review	LUC BWS	Regulator Implementer
226. Ensure that State and private well development projects are integrated into and consistent with City water source development plans.	Watershed Management Plan	BWS	Implementer
227. Support infrastructure improvements that provide for the efficient and secure transmission and delivery of quality water.	Water System Infrastructure Plans	BWS	Implementer
228. Conserve the use of potable water by implementing the following measures, as feasible and appropriate: low-flush toilets, flow constrictors, rainwater catchment and other water conserving devices in commercial and residential developments; indigenous, drought-tolerant plant material and drip irrigation systems in landscaped areas; and reclaimed water for the irrigation of agricultural lands, parks, golf courses and other landscaped areas where this would not adversely affect potable groundwater supply or pose possible health and safety risks.	Building Code, Project Review, Water Supply System and Management Plan	DPP BWS ENV	Regulator/Advocate Advocate Implementer
<b>Wastewater Treatment</b>			
229. Use reclaimed water for irrigation and other uses, where feasible, in accordance with the <u>Guidelines for the Treatment and Use of Recycled Water</u> (May 15, 2002) by the State Department of Health and the No Pass Line established by the Board of Water Supply. A "wetlands" treatment system could serve as wild bird refuges that could also be used as a picnicking area and/or children's fishing park.	Water Supply System and Management Plan, Wastewater Management Plan	BWS ENV	Advocate Implementer
230. Replace outdated individual cesspools with septic tanks and individual wastewater systems. Consider public programs or policies to support private conversion efforts.	Water Quality Management Plan	DOH ENV	Advocate Advocate
231. Discourage new residential, commercial or school uses in close proximity to wastewater treatment facilities where odors may be objectionable.	Zoning/Project Review	DPP	Regulator/Advocate

Policies/Guidelines	Program	Agency	Role
232. Identify appropriate areas and technologies for future wastewater facilities that maintain the rural character and are proportionate to future population projections.	Wastewater Management Plan	DOH ENV	Advocate Implementer
233. Do not permit an ocean outfall for treated wastewater effluent in the North Shore area.	Wastewater Management Plan	DOH ENV	Advocate Implementer
<b>Electrical Systems</b>			
234. Provide adequate and reliable electrical service.	Utilities Plan	HECO	Implementer
235. Locate and design system elements such as electrical power facilities, substations, communication sites, and transmission lines to avoid or mitigate any potential adverse impacts on scenic and natural resources.	Utilities Plan, Project Review	HECO Telecommunications providers DPP	Implementer Implementer Regulator/Advocate
236. Locate powerlines underground or away from Kamehameha Highway.	Utilities Undergrounding Plan	HECO Telecommunications providers DDC	Implementer Implementer Implementer
237. Promote the use of renewable energy sources and energy conservation measures.	Building Code	HECO DPP	Implementer Regulator/Advocate
<b>Solid Waste Handling and Disposal</b>			
238. Expand recycling collection facilities and services, and public outreach and education programs that promote responsible waste management and source reduction.	Solid Waste Management Plan	ENV	Implementer
239. Encourage recycling of regional green waste by establishing green waste facilities in an appropriate location, possibly integrated with or adjacent to the Kawaihoa Refuse Transfer Station.	Solid Waste Management Plan	ENV	Implementer
240. Expand the use of automated refuse collection in residential areas.	Solid Waste Management Plan	ENV	Implementer
241. Monitor and regulate illegal dumping and littering activities.	Solid Waste Management Plan	ENV	Implementer
<b>Drainage Systems</b>			
242. Require all structural and land improvements to provide adequate drainage and flood mitigation measures to reduce storm runoff and flood hazard.	Storm Drainage Standards, Project Review	DPP	Regulator
243. Employ retention and detention methods that allow for the gradual release of stormwater. Where feasible, use open spaces, including parking lots, landscaped areas, and parks, to detain or allow ground infiltration of storm water flows to reduce their volume, runoff rates, and the amounts of sediment and pollutants transported.	Storm Drainage Standards, Project Review	DPP	Regulator
244. Use detention/retention basins as passive recreational areas and to provide recreational access for pedestrians and bicyclists.	Storm Drainage Standards	DLNR DPP DFM private entities	Advocate Regulator Implementer Implementer



Policies/Guidelines	Program	Agency	Role
245. Retain natural gulches as flood plains and open space resources. Restrict development within gulches, and prohibit grading or other disturbance of gulch walls.	State Land Use Law, Land Use Ordinance	DLNR LUC DPP	Implementer Regulator Regulator
246. Emphasize control and minimization of nonpoint source pollution in drainage system design. Where hardening of stream channels is unavoidable, improvements should protect habitat, maintain rural character and aesthetic quality, and avoid degradation of coastline and of stream and nearshore water quality, consistent with guidelines stated in Section 3.1.2.4.	Storm Drainage Standards	DLNR DPP DDC DFM	Advocate Regulator Implementer Implementer
247. Design drainageways to control 100-year floods. Any future work performed within the 100-year floodplain shall adhere to the requirements of the Federal Emergency Management Agency (FEMA) and meet all flood-proofing requirements.	Grading Ordinance, Subdivision Rules	DPP	Regulator
248. Regularly maintain and clean drainageways and flood mitigation structures of debris to ensure that they achieve the purpose for which they were designed.	Facility Maintenance Plan	DFM	Implementer
249. Employ best management practices to minimize runoff from existing conservation and agricultural land uses, and other areas that may generate sediment and debris.	Storm Drainage Standards	DLNR DOA ENV	Regulator/Advocate Advocate Regulator
250. Repair and maintain related agricultural irrigation systems and infrastructure.	Facility Maintenance Plan	DOA private entities	Implementer Implementer
251. Develop a drainage master plan for the Waialua watershed to address erosion and flood protection concerns.	TBD	DLNR ENV	Advocate Implementer
252. Conduct public outreach and education programs that explain the potential for flooding and efforts to minimize the effects of flooding.	Hazard Mitigation Plan	DOH DEM	Implementer Implementer
<b>School Facilities</b>			
253. Confirm the adequacy of school facilities before approving new residential development. Approve new residential developments only after the State Department of Education confirms that adequate school facilities, either at existing schools or at new school sites, will be available at the time new residential units are occupied.	Project Review	LUC DOE DPP	Regulator Advocate Regulator
254. Design DOE schools as community centers to facilitate community use after school hours.	School Master Plan	DOE DPR	Implementer Advocate
255. Colocate elementary and intermediate schools with parks, and coordinate facility design with the State DOE and the City DPR whenever possible to avoid duplication of parking and athletic, recreation, and meeting facilities.	School Master Plan, Project Review	DOE DPP DPR	Implementer Regulator/Advocate Implementer

Policies/Guidelines	Program	Agency	Role
256. Coordinate the development and shared use of athletic facilities such as swimming pools, gymnasiums, and playfields and courts with the DOE where the joint use of such facilities would maximize use and reduce duplication of function without compromising the schools' athletic programs.	Park Master Plan, School Master Plan	DOE DPR DDC	Implementer Implementer Advocate
257. Promote facility design and construction that allows for school buildings to be used as public hurricane shelters.	School Master Plan, Project Review	DOE DPP DPR DEM	Implementer Advocate Implementer Advocate
258. Support the State DOE's request for school impact fees from developers of residential projects to ensure that adequate school facilities are in place at the time new residential units are occupied.	Project Review	LUC DPP	Regulator/Advocate Regulator/Advocate
<b>Public Safety Facilities</b>			
259. Include visitor demands and needs when allocating public safety resources.	Capital Improvement Program	DES DEM HFD HPD	Implementer Implementer Implementer Implementer
260. Sponsor public education programs to increase awareness about public safety issues.	TBD	DES DEM HFD HPD	Implementer Implementer Implementer Implementer
261. Identify, improve and service transportation networks (via signage, traffic control personnel and equipment) to ensure efficient evacuee movement.	Capital Improvement Program	DOT DTS DEM	Implementer Implementer Advocate
262. Support highway improvements that would reduce emergency vehicle response times and facilitate emergency personnel movement through traffic.	Capital Improvement Program	DOT DTS	Implementer Advocate
263. Expand lifeguard services at beaches with high visitor demands, such as Laniākea, Chun's Reef, and Velzyland.	TBD	DES	Implementer
264. Confirm the availability of adequate police and fire protection before approving new development.	Project Review	DPP	Regulator
265. Increase police presence, including car and bicycle patrols and community policing efforts, especially in high-theft areas such as beach parks. Support the availability of adequate staffing and funding to enable this.	TBD	HPD	Implementer
266. Establish facilities which police officers could use as a local base of operations.	TBD	HPD	Implementer
267. Support the physical improvements and infrastructure upgrades needed to ensure adequate fire protection.	Facility Master Plans	HFD	Implementer
268. Use crime-preventive principles in the planning and design of communities, open spaces, circulation networks, and buildings.	Building Code, Project Review	DPP	Regulator

Policies/Guidelines	Program	Agency	Role
269. Design new public buildings such as schools and recreation centers to serve a secondary function as an emergency shelter.	Project Review	DDC	Implementer
<b>Other Community Facilities</b>			
270. Encourage colocation of antennae; towers should host the facilities of more than one service provider to minimize their proliferation and reduce visual impacts.	Land Use Ordinance Project Review	DPP LUC	Regulator Regulator
271. Mount antennae onto existing buildings or structures so that public scenic views and open spaces will not be negatively affected. However, except for the occupant's personal use, antennae on single-family dwelling roofs in residential districts are not appropriate.	Land Use Ordinance Project Review	DPP LUC	Regulator Regulator
272. Use "stealth" technology (e.g., towers disguised as trees) especially on free-standing antenna towers in order to blend in with the surrounding environment and minimize visual impacts.	Land Use Ordinance Project Review	DPP LUC	Regulator Regulator

## APPENDIX A: OPEN SPACE, LAND USE, AND PUBLIC FACILITIES MAPS

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The North Shore Sustainable Communities Plan includes three colored maps:

- Open Space Map
- Land Use Map
- Public Facilities Map

These maps illustrate the North Shore's long-range vision for the future and the major land use, open space, and public facility policies that are articulated in the plan. In examining them, the reader should keep in mind that:

- These maps are general and conceptual.
- They are illustrative of the plan's policy statements, presented in the text of this report.

These policy statements, which appear in the preceding chapters, are considered to be the most important elements of the plan. The maps are considered illustrations of the policies. However, it is recognized that the maps may be more accessible and more interesting than the written policies. This section of the plan, therefore, presents a brief explanation of the contents of each of these maps.

Elements common to each of the three maps include the Community Growth Boundary and four land use designations: "Preservation," "Agriculture," "Parks," and "Military." Descriptions of each are presented below. Common information particular to each map is presented under each map topic.

These maps are not parcel specific, but illustrate generalized categories or groups of land uses within the region. Because they are not parcel specific, the lines depicted by these boundaries do not indicate precise or abrupt demarcations. Rather, the geographic extent or actual magnitude of permissible or appropriate uses depicted within these boundaries should be evaluated and determined in concert with relevant sections of the plan's text and specific site characteristics. This is particularly true of land use designations within a community boundary.

The extent or magnitude of land uses depicted within a boundary may be limited by actual on-site or adjacent conditions such as slope or other topographic constraints, soil type, existing

1 drainageways, flood or rockfall hazard, or the presence of natural or cultural resources.  
2 Conversely, the actual appropriate extent of uses prescribed by a specific boundary may extend  
3 beyond the indicated boundary by virtue of appropriate physical characteristics, compatibility  
4 with adjacent land uses, and physical accessibility, including access to the site from existing  
5 roads. In such cases the physical extent of those uses would be defined by actual site  
6 constraints similar to those which would constrain uses within those boundaries.

## 8 **COMMUNITY GROWTH BOUNDARY**

9  
10 The Community Growth Boundary defines, protects, and contains the intended extent of the  
11 “built-up” or “settled” areas of rural communities. Its purposes are to provide adequate lands to  
12 support established communities, to protect such communities from more intense form of  
13 development, and to preserve lands outside the boundary for agriculture or other resource or  
14 open space values. Areas within this boundary characteristically consist of relatively small,  
15 dispersed residential communities and towns. In the North Shore Sustainable Communities  
16 Plan area, the Community Growth Boundary includes the built areas of Mokulē‘ia, Waialua,  
17 Hale‘iwa, Kawaioloa, and Sunset Beach/Pūpūkea.

18  
19 At the Mokulē‘ia, Waialua, and Hale‘iwa communities, the Community Growth Boundary, from  
20 west to east, generally follows Crozier Drive and a portion of Waialua Beach Road  
21 encompassing the residential uses of Mokulē‘ia and Waialua. Thereafter, it follows Farrington  
22 Highway to Thompson Corner, encompassing the adjoining AG-2 General Agricultural District  
23 and the Hukilau Loop residential subdivision. Thereafter, the boundary follows Kaukonahua  
24 Road to Weed Junction, to Kamehameha Highway, the Joseph P. Leong Highway, and then  
25 follows the Hale‘iwa Special District boundary at Hale‘iwa Beach Park.

26  
27 In the area of Kawaioloa, from west to east, the Community Growth Boundary generally  
28 encompasses the residential uses at Papailoa Road, then follows Kamehameha Highway to and  
29 encompassing the residential uses at Punalau Place and Ikuwai Place, and then along the toe  
30 of the slope and including the residential zoning district *mauka* of Kamehameha Highway.  
31 Thereafter, it follows Kamehameha Highway and encompasses the residential zoning district at  
32 ‘Ili‘ohu Place.

33  
34 At the Sunset Beach and Pūpūkea communities, from west to east, the Community Growth  
35 Boundary includes the residential uses north of Waimea Bay, then *mauka*, encompassing the  
36 Pūpūkea highlands community, then *makai* to and following the toe of slope. Thereafter, the  
37 Community Growth Boundary encompasses the rural and residential zoning districts from  
38 Sunset Beach to Kaunala Beach.

## PRESERVATION

Preservation lands include those lands not valued primarily for agriculture, but which form an important part of a region's open space fabric. They possess natural, cultural, or scenic resource values, and include important wildlife habitat, cultural sites, significant landforms, views, or hazard areas. They include the following types of land:

- Land necessary for protecting watersheds, water resources and water supplies.
- Lands necessary for the conservation, preservation and enhancement of sites with scenic, historic, archaeological or ecologic significance.
- Lands necessary for providing and preserving parklands, wilderness and beach reserves, and for conserving natural ecosystems of endemic plants, fish and wildlife, for forestry, and other related activities to these uses.
- Lands having an elevation below the maximum inland line of the zone of wave action, and marine waters, fishponds and tide pools of O'ahu unless otherwise designated on the development plan land use map.
- All offshore and outlying islands of O'ahu unless otherwise classified.
- Lands with topography, soils, climate or other related environmental factors that may not be normally adaptable or presently needed for urban, rural or agricultural use.
- Lands with general slopes of 20 percent or more which provide for open space amenities and/or scenic values.
- Lands susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the State or Federal Government, and lands necessary to the protection of the health, safety and welfare of the public by reason of soil instability or the lands' susceptibility to landslides and/or inundation by tsunami and flooding.
- Lands used for national, state or city parks.
- Lands suitable for growing of commercial timber, grazing, hunting, and recreation uses, including facilities accessory to such uses when said facilities are compatible with the natural physical environment.

## 1    **AGRICULTURE**

2  
3    Lands with agricultural value by virtue of current agricultural use or high value for future  
4    agricultural use, including those areas identified as “Prime,” “Unique,” or “Other” Important lands  
5    on the Agricultural Lands Important to the State of Hawai‘i (ALISH) maps. “Agriculture” includes  
6    lands suitable for crop growing, grazing and livestock raising, flower cultivation, nurseries,  
7    orchards, aquaculture, or similar activities.

8  
9    Under the State Constitution, the State is to identify important agricultural lands (IAL). Once  
10   identified, these lands cannot be rezoned except under a “super majority” vote. To date, IAL  
11   lands have not been identified. In 2005, Act 183 was adopted to address this mandate. It  
12   established a two-step process: first, incentives to assure the long-term use and protection of  
13   IAL. Second, with adequate state funding, the counties would prepare maps identifying IAL  
14   lands to be adopted by the State Land Use Commission. Act 233, enacted in 2008, adopted the  
15   incentive programs. To date, no state funding has been appropriated to the counties for the  
16   mapping. Lands identified for agricultural purposes by this SCP can serve as the basis for the  
17   county mapping process.

## 18 19   **PARK**

20  
21   Public and private parks and recreational facilities, including beach parks, playgrounds,  
22   playfields, and district parks.

## 23 24   **MILITARY**

25  
26   Lands for military and military support purposes, excluding military-owned lands that are leased  
27   or licensed to others on a full-time basis for nonmilitary uses.

## 28 29   **A.1   OPEN SPACE MAP**

30  
31   The Open Space Map is intended to illustrate the region’s major open space patterns and  
32   resources as outlined in Chapter 3. It highlights major open space elements and resources,  
33   including agricultural and preservation lands, major parks, important “panoramic” views, natural  
34   stream corridors and drainageways, and rural communities within the Community Growth  
35   Boundary.

## **A.2 LAND USE MAP**

This map illustrates the desired long-range land use pattern for the North Shore Sustainable Communities Plan area. It supports the plan's vision and policies. The map includes the following terms:

### **A.2.1 Rural**

Single-family homes on large lots. On-site development is characteristically low-intensity, typically consisting of single-family detached home, ancillary structures, if necessary, low site coverage, nonurban development standards, and a large predominance of landscaped open space.

### **A.2.2 Rural Residential**

Single-family homes in country settings on medium-sized to large lots, on which rural development standards are employed and provisions for pedestrian circulation, landscaping, and open space are emphasized. "Rural Residential" also includes minor pockets of existing apartment areas in Mokulē'ia, and future apartment districts adjacent to Waialua and Hale'iwa town centers. These apartment lands are not mapped but are cited and elaborated in the text.

### **A.2.3 Rural Community Commercial Center**

A small cluster of small-scale, low-rise commercial and service businesses which serve primarily the immediate community. Its primary visual appearance is rural. Buildings are generally compatible in scale and form with adjacent residential areas.

### **A.2.4 Country Town**

A small-scale, low-rise, mixed-use center of commerce and community activity in rural character and setting in which principal establishments are oriented to the street. Land use mixtures may include retail, office, and dining establishments, compatible service businesses and light industry, and residential uses. Commercial activity is concentrated along street frontages in typically "Mainstreet" settings.



## **A.2.5 Industrial**

Facilities for processing, construction, manufacturing, transportation, wholesaling, storage, or similar economic activities, and accessory or supporting facilities which directly enhance their viability.

## **A.3 PUBLIC FACILITIES MAP**



The Public Facilities Map illustrates the major infrastructure needed to implement the vision for the North Shore. It shows the location of existing facilities and conceptual location for some of the future required infrastructure facilities.

It is not meant to be amended between revisions of the Plan and should not be confused with the Public Infrastructure Map (PIM) used in the Capital Improvement Program budget process. Major public facilities which are to be funded through the City Capital Improvement Program budget appropriation must be shown on the PIM. The PIM is not part of the North Shore Sustainable Communities Plan, and is adopted and amended by resolution.

Projects which are not listed in the North Shore Sustainable Communities Plan or not shown on the North Shore Sustainable Communities Plan maps can still be added to the PIM by Council resolution if the Council finds them to be consistent with the vision and policies of the North Shore Sustainable Communities Plan.



# NORTH SHORE SUSTAINABLE COMMUNITIES PLAN OPEN SPACE MAP

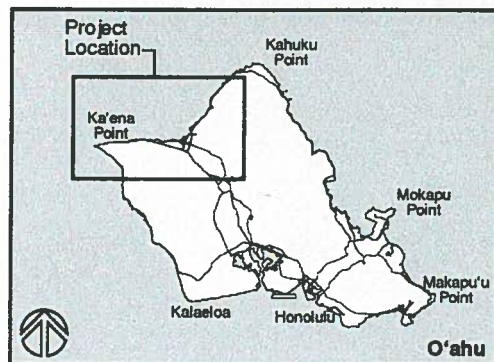
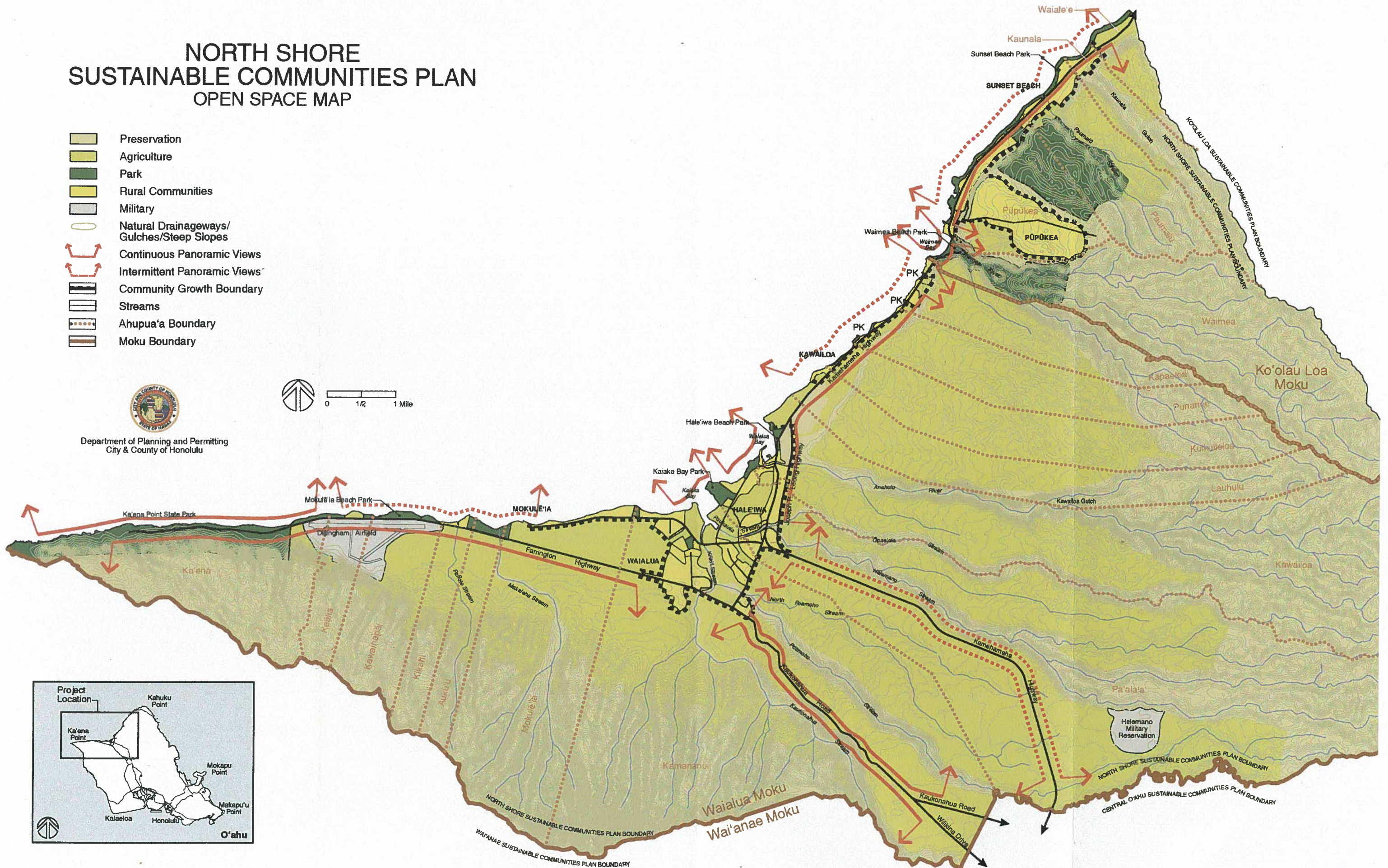
-  Preservation
-  Agriculture
-  Park
-  Rural Communities
-  Military
-  Natural Drainageways/  
Gulches/Steep Slopes
-  Continuous Panoramic Views
-  Intermittent Panoramic Views
-  Community Growth Boundary
-  Streams
-  Ahupua'a Boundary
-  Moku Boundary



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














0 1/2 1 Mile





# NORTH SHORE SUSTAINABLE COMMUNITIES PLAN LAND USE MAP

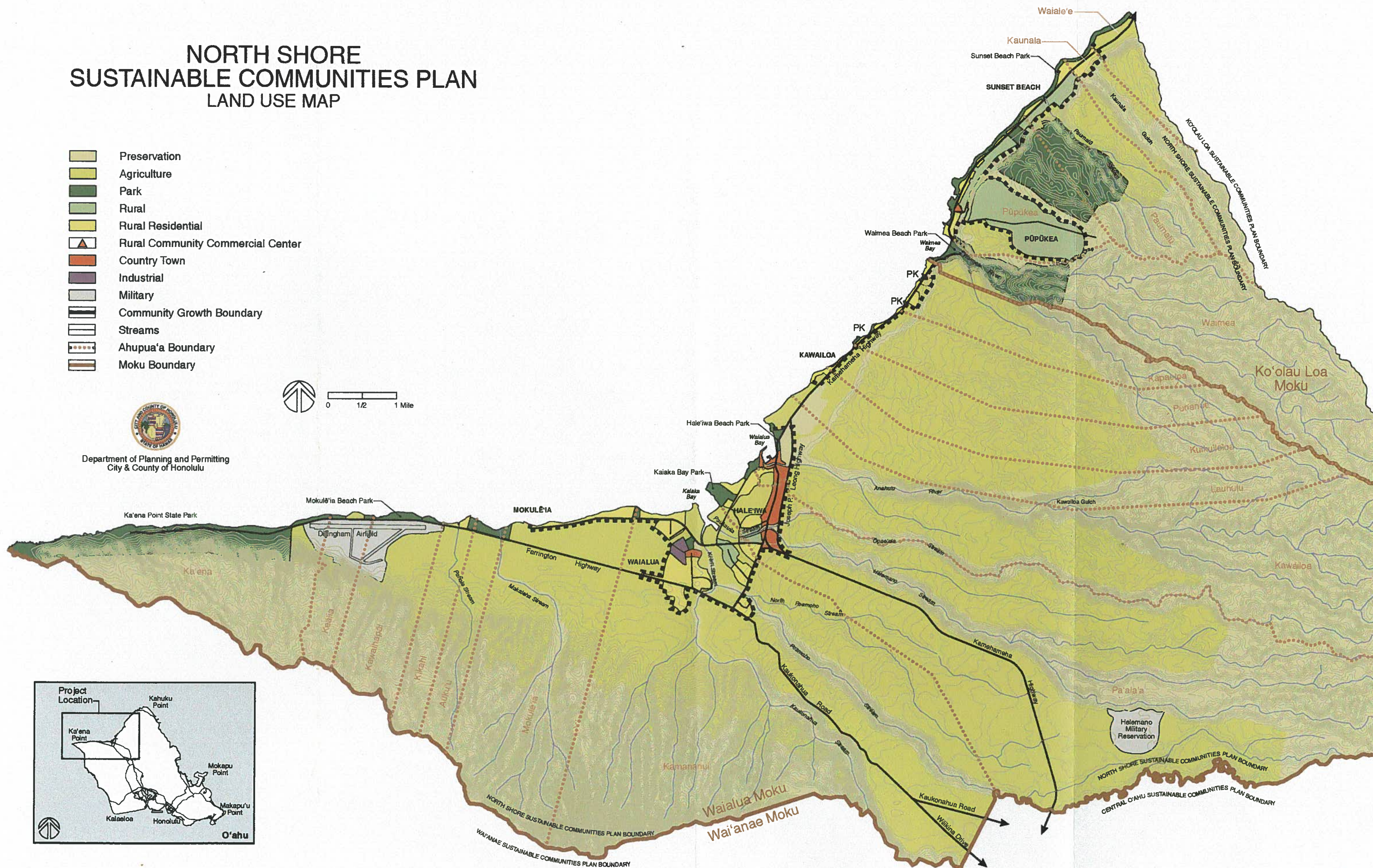
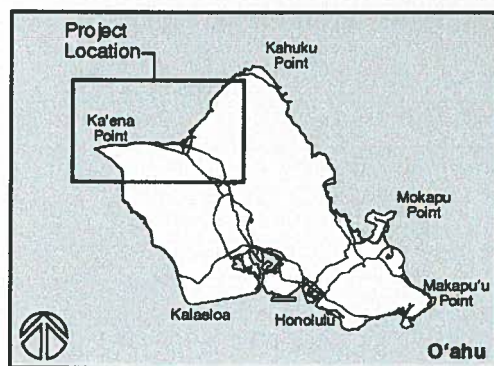
- |   |                                   |
|---|-----------------------------------|
|  | Preservation                      |
|  | Agriculture                       |
|  | Park                              |
|  | Rural                             |
|  | Rural Residential                 |
|  | Rural Community Commercial Center |
|  | Country Town                      |
|  | Industrial                        |
|  | Military                          |
|  | Community Growth Boundary         |
|  | Streams                           |
|  | Ahupua'a Boundary                 |
|  | Moku Boundary                     |



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A horizontal number line representing distance in miles. It starts at 0 on the left and ends at 1 Mile on the right. A tick mark is placed exactly halfway between 0 and 1, labeled  $\frac{1}{2}$ .





# NORTH SHORE SUSTAINABLE COMMUNITIES PLAN PUBLIC FACILITIES MAP

-  Preservation
-  Agriculture
-  Park
-  Rural Communities
-  Military
-  Community Growth Boundary
-  Streams
-  Ahupua'a Boundary
-  Moku Boundary

## EXISTING FUTURE

- |   |   |   |
|---|---|---|
|  |  | Wastewater Treatment Plant  |
|  |   | Refuse Transfer Station   |
|  |   | Elementary School   |
|  |  | Intermediate & High School  |
|  |   | Small Boat Harbor   |
|  |   | Airfield  |
|  |   | Agricultural Support  |
|  |   | Highways, Arterial & Collector Streets (Improvements)   |
|  |  | Bikeways (Based on Draft O'ahu Bike Plan; July 2009<br>Check Draft Bike Plan for detailed facilities) |



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0 1/2 1 Mile

